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ORIGINAL ARTICLES

A BRIEF REVIEW OF SOME PHASES OF LOCAL ANESTHESIA

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Attempts have been made since ancient times to produce anesthesia by local or regional means, as well as by general narcosis. Probably the oldest method used was that of compression of nerve trunks which accomplished its purpose to a certain extent, and by means of it amputation was performed with little pain. This means of anesthesia was abandoned because of the actual pain of the pressure, the time required to produce it, and its serious after effects².

Long after compression fell into disuse, cold applications were used for local anesthesia. This method produces anesthesia by blocking the conduction of sensation, but it is of brief duration, and has only a limited use. It is accomplished at the expense of pain, and the return of the tissues to their natural state is also painful.

Drugs known to have narcotic properties were used in efforts to produce local anesthesia, as it was believed that they would have the same effects if applied to the skin. The electric current was used in this connection in the attempt to aid the absorption of the drugs. Probably the only effect of electricity was that of suggestion.

The introduction of the hypodermic syringe by Alexander Wood in 1853 was an important step in the history of local anesthesia, as it afforded a new means of getting solutions of drugs into closer contact with the nerve supply. Other sub-

stances were injected with the hypodermic syringe, but none was satisfactory until the discovery of cocain, which gave a new stimulus to the subject of local anesthesia. The great toxicity of cocain was early recognized, and the efficacy of dilute solutions emphasized. The addition of epinephrin to cocain seemed to be another step forward,

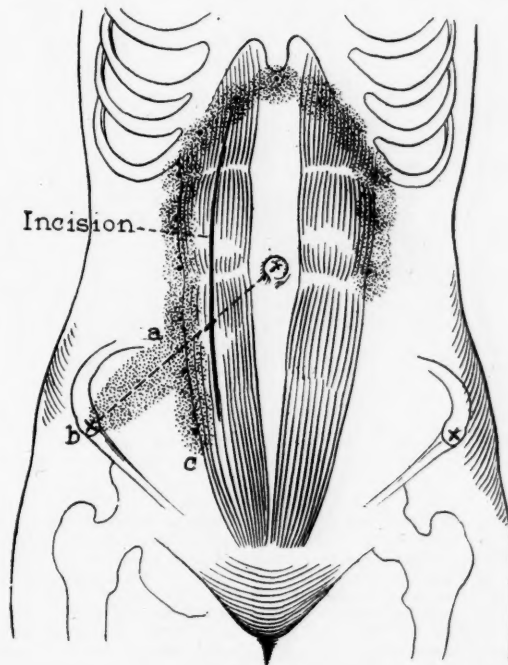


Figure 1.

Abdominal-wall block for laparotomy is executed along the curved dotted line running through "ac" and immediately below the xiphoid process. For herniotomy, the abdominal wall is blocked on a line drawn through the umbilicus to the anterior superior spine (the broken line passing through "ab" and to the umbilicus). This as well as any part of the abdominal wall is blocked as described in Figure 2.

²Read before the Detroit Academy of Medicine and Surgery, Detroit, Michigan, January 24, 1927.

since by hindering absorption this seemed to afford a safeguard against poisoning. Less toxic substitutes for cocain have been introduced, chief among them being procain.

Since the discovery of suitable anesthetic agents has been quite recent, the field of modern local anesthesia is comparatively new and offers many possibilities for further development. Modern notable contributions to the development of local anesthesia have been made by Crile, Allen, Labat, Farr, Braun, Harris, Hertzler, and others. The use of modern anesthetic agents is well illustrated by the following tabulation:¹¹

AGENTS USED DURING FOUR YEARS IN THE MAYO CLINIC

	1925 Per- cent	1924 Per- cent	1923 Per- cent	1922 Per- cent
Anesthetic				
Ether	20.3	25.8	40.8	44.9
Local agents	45.0	43.2	42.2	42.2
Local agents and ether.....	1.7	1.4	1.1	8.6
Local agents and gases.....	4.1	0.9		
Gases	28.4	27.6	15.4	3.8
Chloroform	0.09	0.08	0.1	
Ethyl chlorid	0.1	0.2		
Oil-ether (colonic)	0.01			
Spinal agents		0.01	0.04	0.4

According to the foregoing data the popularity of local anesthesia has remained statistically the same in the last four years. Nevertheless, due to an in-

crease in the total number of cases in 1925, over 1924, there has been an actual increase in the number of cases of local anesthesia in 1925. The cases of local anesthesia, either alone or combined with general anesthesia, constituted slightly more than 50 per cent of the total for 1925. In some cases in which local anesthesia was induced, it was intentionally combined with general anesthesia to insure completely satisfactory results.

There has been a tendency to use what I like to term "balanced anesthesia," which is the combination of moderate amounts of preliminary hypnosis and general and local anesthesia. This should be a popular form of anesthesia, since at the present time there is no one anesthetic agent that can be considered ideal in all cases. The satisfactory results attending balanced anesthesia from the standpoints of the sur-

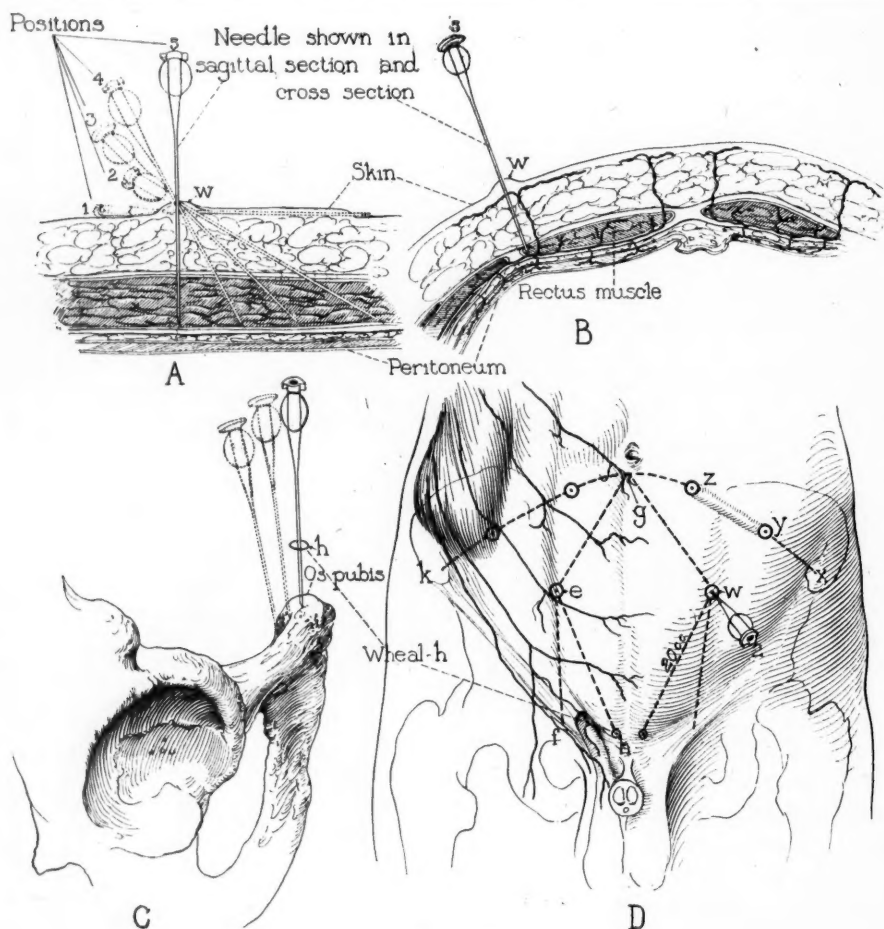


Figure 2

Abdominal-wall block for cystostomy. The injection consists of 100 c.c. of 0.5 per cent procain solution at body temperature with 6 minims of 1:1000 epinephrin (1 c.c. ampule, 1:2600). Anesthesia is induced in ten minutes and lasts for one hour. The three zones of injection are shown in D. In order of the frequency of use they are: "e" to "f" and "e" to "g" (no hernia present; "e" to "h" and "e" to "g" (reducible hernia present); "k" to "g" (irreducible hernia present). All are bilateral. The blocks "e" to "f", "e" to "g", and "e" to "h" are done from wheal "w", as shown in A, B, and D. The space of Retzius is injected from wheal "h" (C and D), 10 c.c. on each side. Wheal "w" is shown in sagittal section in A, in cross section in B, and from in front in D; it is placed in the skin at the border of the rectus muscle midway between the umbilicus and pubes. In D the appearance of the skin after a solution has been injected from "y" to "z" through the needle in A in first position. In B and D, the nerves to be blocked are shown in heavy black lines. In A the needle is shown in five positions in each of which 2 c.c. of solution is used. Thus a 10 c.c. syringe contains enough solution to block a brick-shaped area, a lateral view of which is shown in A. Such blocks, like blocks under various arrangements, result in various types of abdominal-wall block shown. In D, the lines "ef", "eg", and "eh" each traverse the ventral face of a "brick" of anesthetized tissue. In the average case two injections of 10 c.c. each are made into each brick; the second reinforces the first one.

geon, anesthetist, and patient warrant the use of this method in an increasing number of cases. The factors determining the anesthetic to be used do not always per-

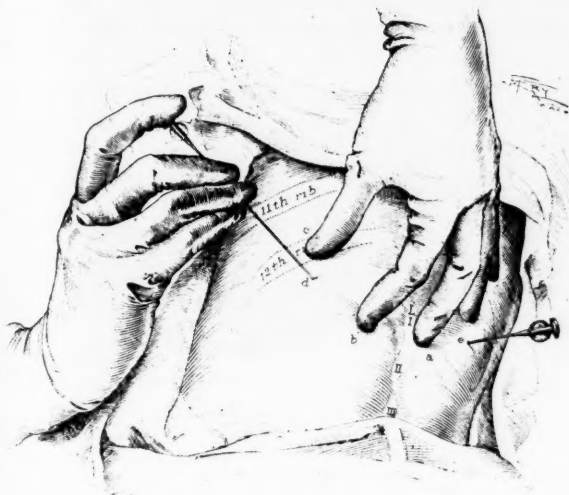


Figure 3.

Posterior splanchnic block. This figure shows the needle for posterior splanchnic block and the patient in a prone position with pillow under the abdomen.

mit a choice, and therefore balanced anesthesia will probably not be employed in all cases in which it might otherwise be used to advantage.

Regional anesthesia has been extended to practically all parts of the body, but this does not imply that it is to be preferred to general anesthesia in all cases. It is also difficult and unfair to make a comparison between local and general anesthesia, for the procedures and results of each are based on different principles and each has its particular merits. One of the objections to regional anesthesia is the frequency of marked untoward drug reactions. However, the number of untoward reactions to procain at the Mayo Clinic has been reduced to an average of about 2 per cent. This result has been ac-

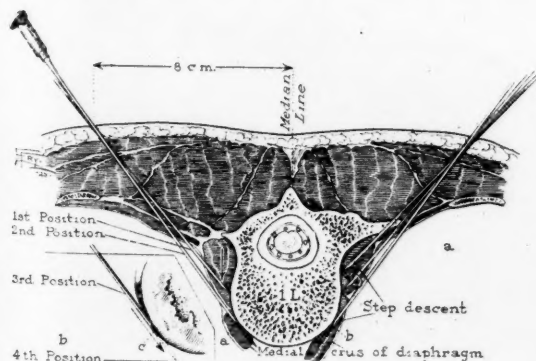


Figure 4

"a" shows the descent of the point of the needle along the lateral surface of the body of the first lumbar vertebra. Insert "b" shows the point of the needle resting at "c", its last bony contact before being advanced into the paravertebral region or fourth position.

complished by deliberate and unhurried technic, and by moderation in the dose of the anesthetic agent. The concentration and quantity of the anesthetic solution used must be considered in regional anesthesia, as well as that of the epinephrin solution, if it is also used. At this point I wish to call attention again to certain important factors in the use of procain. These are the concentration, the amount of solution, the time consumed by its injection, the pulse, blood pressure and the size and age of the patient. I have attempted to arrange them in an equation, which in a general way in regional anesthesia⁸ indicates the dose of procain without unto-

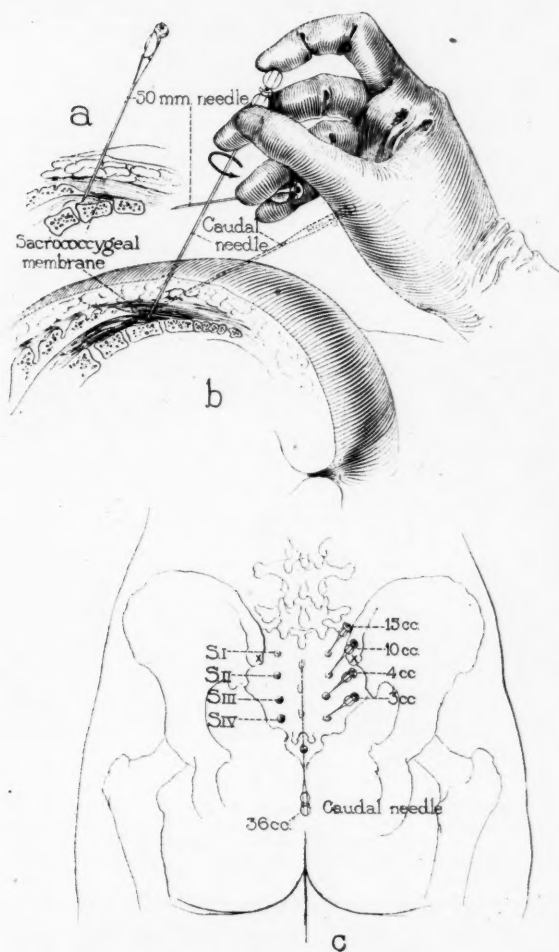


Figure 5.

Sacral nerve block. The injection consists of 100 c.c. of 1 per cent procain solution at body temperature with 6 minims of 1:1000 epinephrin solution (1 c.c. ampule, 1:2600). Patient in the prone position, pillow beneath pelvis. Anesthesia induced in fifteen minutes after injection and lasts for an hour or more. "a", A 50 mm. needle is inserted through a wheal in the sacrococcygeal membrane into the tip of the caudal canal and 5 c.c. of solution injected to make painless the insertion of the caudal needle; "b", the 50 mm. needle is withdrawn and the caudal needle inserted in its stead and advanced into the caudal canal, after being rotated so that the bevel rests on bone; "c", dorsal view of sacrum with caudal needle in position as well as those in SI, II, III, and IV (that is the first, second, third, and fourth sacral foramina). A total of 36 c.c. of solution is placed in the caudal canal in the average case. The average amount of solution for each foramen on each side is shown. The sacral nerves are thus blocked; the patient is then turned on his back and the abdominal wall is blocked.

ward reaction. The preparation of the procain solution has been described previously and is well known⁶. I base my use of epinephrin on the amount, not the strength, of solution, that is, 6 minims of a 1:1000 solution of epinephrin to each 100 c.c. of procain solution. However, the condition of the individual patient and an untoward reaction following the injection of the first part of the solution may contraindicate its application.

There are many textbooks on regional and local anesthesia available at the present time, wherein one may find descriptions of various technics to be followed in producing anesthesia for operations in various parts of the body. I shall not attempt to discuss other than the types of block more commonly induced. For operations on the head one may consult the textbooks. For operations on the region of the neck, I have found a modification of the method of Meeker and Hundling very satisfactory, especially for such operations as laryngectomy, thyroidectomy, and the removal of lymph nodes from the



Figure 6.

Patient on table; nurse palpating pulse. The caudal needle is being inserted, the 50 mm. needle is still between the small and ring fingers of the anesthetist's right hand. The fingers of his left hand depress the point of the caudal needle.

neck. At the same time no objection can be raised to the infiltration of the soft parts of the neck with a dilute solution of procain, and it is to be especially recommended in cases of goitre in which the surgical risk is grave¹.

For the various operations on the chest, regional and local anesthesia have been employed by many. Local anesthesia has been advocated for thoracoplasty and other major operations on the chest⁵. Gaseous anesthetic agents are also recommended for operations on the chest³. It has been my experience that a general anesthetic such as nitrous oxid, ethylene, or

ether, is preferable to local anesthetics for radical amputation of the breast.

For operations on or through the abdominal wall almost all the existing methods except paravertebral block usually produce anesthesia. Figures 1 and 2 are

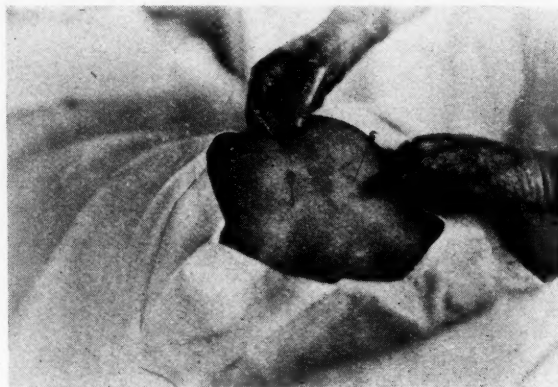


Figure 7.

Caudal needle in caudal canal, and 80 mm. needle in second sacral foramen on each side. The tip of the left middle finger rests over the left posterior superior spine. The tip of the right index finger is on the end of the coccyx. The tip of the right thumb is opposite the left sacral cornu about 3.75 cm. from the end of the coccyx.

descriptive of the methods commonly employed at the Clinic, and the results have been satisfactory. For intra-abdominal operations posterior splanchnic block has been employed in a series of cases^{7,9}, by the method illustrated in Figures 3 and 4. It produced satisfactory anesthesia in only 48 per cent of the cases, and for that reason has been supplanted by balanced anesthesia in many of the cases presenting grave risk.

For operations on the extremities the textbooks may be consulted. For operations in the rectum¹⁰, bladder⁴, and perineum, sacral anesthesia has usually been found to be satisfactory, and in most in-



Figure 8.

Caudal needle in sacral canal; needle in the second sacral foramen on each side. Tip of left middle finger on left posterior spine. The right hand holds the stilet of the caudal needle so that its point lies at the level of the third sacral foramen. (Of course the point of the caudal needle lies in the canal at the same level as the point of the stilet lies on the skin.) The syringe lies over the patient's lumbar region.

stances is preferable to spinal anesthesia. Its value is emphasized by Martin and Arbuthnot¹², in reviewing 6000 cases of spinal anesthesia. They say that sacral anesthesia is preferable to spinal wherever it can be employed. Figure 5 may serve to recall the anatomy involved in the application of sacral anesthesia and the technic.

Sacral anesthesia is one of the most satisfactory forms of present-day regional anesthesia, and is commonly used in the Mayo Clinic for operations on the rectum and bladder; it is frequently used for operations on the perineum with satisfactory results (Figs. 5, 6, 7, and 8).

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MICHIGAN ONE HUNDRED YEARS AGO

The letters of a Doctor, locating in Pontiac, to his relatives in New York.

EDITOR'S NOTE: The following letters, written one hundred years ago, furnish most interesting incidents of medical practice and pioneer days. We feel certain that our members will gain pleasure in reading them. We are indebted to Dr. B. R. Corbus for making them available.—Editor.

Weedsport, Oct. 20th, 1828.

Dear Sir:

From the date and place you may perceive that I have not got along on my journey as fast as I had anticipated. The line boat on which I embarked at the lower aqueduct did not get into Schenectady until late in the afternoon. The packet had started and I found that I must be delayed until the next noon or continue on the same boat to Utica. Being belated in the same way at Utica I went on to Weedsport and got here

at midnight on Sunday. I went yesterday with George to Auburn. From want of time I cannot give the particulars of my journey until I write from Buffalo. Thus far I have been delighted with the tour and have taken notes and which I will transcribe in my next.

I have called on the physicians in this place and find as I have anticipated that there was nothing to tempt me to remain. This part of the country is crowded with doctors and the whole business of Weedsport and vicinity may be worth twelve or \$15.00.

I take the western packet at noon. The packets do not run the whole length of the canal. You have to take another line at Utica and Rochester; at the latter place I shall be detained one day. I shall not get to Buffalo until Friday evening.

The fare is 3 cents and meals extra.

Yours, etc.,

D. L. Porter.

W. P. Porter.

Detroit, 23rd Oct., 1828.

Dear Sir:

I shall now in as condensed a form as possible endeavor to describe the "most interesting views or those which appeared to me such on my route. After leaving you at the lower aqueduct we moved on at a snails pace for Schenectady. The scenery on this section of the canal is splendid. About half way between the two places is a range of rocks towering upwards of a hundred feet, once the bank of the river but now the heel path of the canal. It would be most similar to (please to call imagination to your aid) a canal at the foot of the rocks under the banks of the Mohawk, immediately below the Cohoes falls. The earth to form the tow path was brought from a considerable distance. Four miles from it we have of the most romantic views on the whole western tour if you except that on Lake Onondaga. If you should ever find it convenient by going a little out of your way do it by all means as you will be well rewarded for your trouble. The company on the boat was not worth much I can assure you. It was almost night before we got to Schenectady and found that the packet had gone and that I must either remain on the same boat until we arrived at Utica or stay about 20 hours at S. We then passed Rotterdam, Amsterdam, Schoharie Creek, Caughnawaga, Sprakers basin during the night. In the morning and day Canajoharie, Fort Plain, Indian Castle, Finks Ferry. That night Little Falls, Herkimer Bridge, German Flats, Frankfort and at noon on Saturday, Utica. Utica is an elegant place and does a great deal of business. Their Broadway is occupied by gentlemen's seats and churches. Two attracted my attention, an Episcopal, the smallest but finest externally in a very superior order and a large Presbyterian, the front and sides of imitation marble. There is also in the place an elegant Catholic chapel in imitation of the cathedral at New York. The court house is a very indifferent building. Genesee Street is the one for business. It is about three-quarters of a mile in length rising gradually to the south end of the street which runs north and south. From this point you have a very fine view of the place and particularly of this street which is wide and well paved. The buildings are generally good and there is a great display of all kinds of goods, women, horses, carriages, etc. The bridges which cross the canal are in general very low and dangerous to boats. About two hours after our arrival we heard the horn summoning the passen-

gers on board, who had increased in number and respectability of appearance. They were generally western farmers on their return from visiting their friends at the east. Though not the best of company, I contrived to obtain a good deal of useful information of them. The next place of any note was Oriskany, celebrated for its woolen manufactory. It is very large, good looking building on the tow path. It employs 200 hands the year around. The water is conducted to it in a culvert under the canal. The cloth manufactured at this place has acquired a deserved reputation for the superior execution and color of their goods.

It was just after sundown on Saturday evening when we arrived at Rome. The principle feeder for the 69 $\frac{1}{4}$ mile level enters the canal at this place. By the by, we have nearly all day sailed through a swampy forest with here and there a clearing for a lock house or a log hut. Even the villages are surrounded by very circumscribed clearings. We saw abundance of game during the day. Near Rome the Mohawk dwindles almost to a brook. It is about the size of Pawlet River and as crooked as the Dutchman's tree which could not remain in any position in quiet. In the morning when I woke we were at Canastota, 116 miles west of Schenectady. During the early part of the day we passed several places not even deserving a name and the same appearance of forest. At 2 p. m. arrived at Syracuse. This village has been in existence about 8 years. Its appearance is prepossessing. The buildings display a considerable degree of taste and are mostly painted. All of course are new. They have some fine churches. To the north west is seen the village of Salina one mile from Syracuse on the east end of Onondaga Lake. At this place the salt works first commenced and it was the place which surrounded the surrounding villages with the water for their works by means of a pump worked by steam and discharging 190 gallons of the water in a minute and conducted in logs 4 miles west to Liverpool one and one-quarter miles south east to Syracuse and three and one-quarter south west to Geddisburgh. The water is evaporated in immense vats at Syracuse. They cover 60 acres. Salina, Geddisburgh and Liverpool boil it away. The works at Salina cover about 400 acres, at Liverpool 50 acres, Geddisburgh 17 acres. The quantity prepared at these places is immense but I was unable to obtain any information which could be depended upon for the amount. If you examine Spaffords Gazeteer you will obtain a great deal of information which was out of my power, it being Sunday, etc. At Geddisburgh (two and one-half miles west of Syracuse) you have an elegant view of Onondaga lake, which is about 10 miles long and three wide. At the same time you see Liverpool, Salina and Syracuse. The first to the west side; four miles east of that the two and one mile south of that Syracuse. They are all beautiful villages. Between the two last are the new court house and jail, both in a commanding situation and well built. The lake is a curiosity. The surface is slightly brakish, but water taken from the bottom is intensely salt. Onondaga village is two miles south of the lake and is not visible. After passing a great number of small villages deserving no particular notice, we arrived at Weedsport at 1 o'clock Monday morning. In the morning I went about the village which contains about 400 or 500 inhabitants and 100 houses of all denominations. I found George. He is in a very good business. The store is on the canal wharf in the center of the village and has a good run

of business. The situation of the place is favorable for business; it is the center of Cayuga county and the port from which the goods for the village of Auburn and the rest of the county receive their goods. It is the forwarding of these goods to the owners that constitutes the heft of George's business and is very profitable. Situated as the town is it will eventually become the capital of the county.

I rode over to Auburn with George, a distance of seven and one-half miles south over a very rough road. Unfortunately it commenced raining just as we got there and we could only go about for a few moments at a time between the showers to view the place. The prison, a gloomy looking building containing 700 prisoners, is at the north west part of the village. Directly east of this is the Theological Seminary of the Presbyterians. It appears that there was a blow up here, the same as in Troy with Doctor Lansing, and the church was divided; the opposition are building an elegant new church in the Gothic stile and Lansing has been driven from the place by his own violence and the unyielding obstinacy of the opposition. Manufacturing and flouring of every description is carried on to a great extent. There are many elegant buildings in the place, some you might with propriety call palaces, but Robisons observation is too true. "All your fine buildings are employed as taverns and places of amusement." The corporation of this place have with praiseworthy perseverance overcome almost insurmountable obstacles to beautify the place. There is an extensive water power here which is created by the outlet of Cayuga lake and which passes through the center of the place. It also runs at the foot of the prison walls and here it is used for a satinet manufacture in which the prisoners alone are employed. Each man weaves 12 yards a day of a superior quality. All kinds of mechanical business is carried on here and much of it by water power. The prisoners are all made to work at something. There are many elegant country seats near this village.

October 20. This morning I went to see the mineral spring in the neighborhood of Weedsport. It has just enough sulph of iron and sulph hydrogen gas to make it disagreeable. At noon I got aboard of the packet for Rochester. It was very cold and windy. We however had plenty of good company. 21st, 10, Arrived at Rochester. Being belated more than an hour they would not allow us a moment to examine the place. The aqueduct over the Genesee river is a splendid work made entirely of stone. The flouring business is carried on here on the most extensive scale in the United States. One mill has 17 run of stone. The mills are built of stone and there is not one drop of water which passes through the river without first traversing a flume. It would be impossible to give you any idea of the works on this river and vicinity. We immediately embarked on another packet and arrived this morning at 11 o'clock at Buffalo. There was nothing particularly deserving of note on the route except the deep cutting at Lockport. The canal here raises by five double locks 60 feet. All cut to an immense depth in the solid rock. As you go from one lock you enter another, the front gate of the last serving for the back gate of the next. All the view I had of it was by the light of the lamps, it being 2 o'clock in the morning when we passed. Three miles north of Buffalo we passed Black Rock, a very indifferent place. Gen. Horters palace is the only building worth

noticing. My fingers ache with writing so much and I must defer my description of Buffalo until my next. This afternoon I went to Black Rock and delivered Mrs. Closes letter to Mr. Bird, who treated me with great politeness and has engaged to send letters to me before the boat goes on with an introduction to Augustus Porter, an influential lawyer in Detroit. A Mr. Jones and Gov. Cass. For all this I have to thank Mrs. Close which I most heartily do, do you remember to give them with my thanks the first time you see her. The steam boat Henry Clay, leaves here at 9 o'clock tomorrow morning. You spoke about my fare, Aqueduct to Weedsport \$5.00 (Big trunk 25 cts.) Weedsport to Rochester, 73 miles, \$3.50. Rochester to Buffalo, 93, \$3.38.

Yours, etc.,

L. D. Porter.

W. P. Porter.

P.S.—This is to be understood as intended for the whole family. As such, my respects, etc.

Detroit, November 1st, 1928.

Dear Brother:

I take the earliest opportunity to inform you of my selection of a place, the prospects for business and as complete an analysis of the character of the people in this outlandish region as I have been able to obtain from my short residence amongst them. I left Buffalo last Saturday at daylight in the Henry Clay. Friday was her regular day but owing to the high south west by west wind they were afraid to start. On Saturday the wind was high and continued rising all day and we made but little head way; when we got off Erie it was a perfect hurricane and they could not land the passengers. The next morning we got to Grand River and landed the passengers with great trouble and risk. The waves were very high and it took us three hours to make eight miles. It lulled slightly in the middle of the day and after running 30 or 40 miles it came on harder than ever. At sundown the engineer and pilot informed the captain that in spite of the engine we were driving ashore. The anchors were cast and between them and the engine we remained stationary until morning. Of all the ludicrous scenes and disgusting as ludicrous you never saw the match to that aboard the boat on that night. Of 200 passengers, myself and two others alone escaped sickness. We got no supper and if they could have kept the tables stationary it would have required a hand to every dish to have kept them stationary. It was as much as we could do to keep ourselves in our berths and those on the floor rolled from one side to the other, straining and groaning and vomiting and sopping it up with their clothes, men, women and children promiscuously. In the morning we had a view of Cleveland and an indifferent place it is. The wind was high all day and at sundown we made Sandusky, about the size of Stillwater. Arrived in Detroit early Tuesday morning. Never, if you wish one moment's comfort, navigate any of the western lakes in the fall or early in the spring. Captain Norton, however, tells me that he has not for 15 years had such a hard trip, but at those seasons of the year it is very liable to storms of more or less violence. The fare was ten dollars. One day's extra board (while at Buffalo) one dollar. Extra baggage seven and six pence.

DETROIT

Detroit covers nearly as much ground as Troy but is not compact. The houses are indifferent, most of them miserable; streets wide and muddy,

side walks few and far between. One public house (all the rest broke down.) Abundance of all kinds of provisions but not one article that is cooked so as to be half eatable. Fare \$1.00 a day or \$5.00 a week by the month. There being no opposition they tuck it on without mercy and there is no remedy as no one will take a boarder for less than one month pay in advance. There are three churches of the most indifferent architecture. A plain brick State House. The Governor's residence is an old wooden building about the size of the old part of the Kilby house where Sherwood lives, but only a story and a half high. There are about 20 stores, as many mechanics of all denominations, 14 lawyers, two priests, 13 physicians, three of whom keep drugs and medicine. You may judge of the prices by what I have to pay. Three dollars for a common size mortar and pestle, 50 cents for carb of soda, \$1.50 for calcend magnesia, 88 cents for carbonate just as good, \$8.00 for opium (by the by I had none with me. I thought I put up some), 38 cents for pill boxes—3/5 per viols, \$1.50 for vol ammonia, 1/9 for salts, 10/2 for bottle of lost oil. For quinine they charge \$7.00, bark \$1.50 lb. Every other article in proportion. The population is about 4000 to the extent some say less.

OAKLAND COUNTY

I took out my Territorial License for which I had to pay \$5.00 and have to report myself to the Oakland County Medical Society and have to pay \$2.00 to them. The penalties for practicing without these certificates is on conviction for every offense \$500.00 and imprisonment at the discretion of the court, the money to be laid out in new roads. The Council or Legislature are now in session. There are 13 members. I have been introduced to them all and all advise me to go to Washtenaw county (where Hays is) or Oakland the capital of which is Pontiac. I have seen Hays, he is doing nothing at present. There is an old physician in the town and he has a hard row of it at present. He is very desirous of forming a partnership on equal terms, each putting in like capital, \$250.00 which is to clear us for the year. Nothing else will do for him as he says he cannot get a credit for anything, everybody being driven for money and fearing strangers. I concluded to visit Pontiac in Oakland County before I gave him any answer. I got into the stage on Friday morning for that place 25 miles from here. After going one mile we came to the forests which extend eight miles west, for this eight miles it is one impassable marsh having a corduroy road which is made by laying logs across the road to a height of two feet above the swamp and then drawing on six inches of clay. Owing to the wet weather this was a complete bed of stiff mortar, the horses every three or four steps going down between the logs belly deep. It took four hours to get over this distance, the passengers walking the whole distance. (Do you recollect paddys working his way on the canal.) (This is a dead water level and the only way to drain it is to commence cutting through the plain at Detroit. We then came to the first rise of ground about eight feet to the oak openings or bastard prairies. Thousands of acres extend for an incalculable distance of as elegant soil as ever you saw covered with a close sod of coarse high grass with scattering trees of oak and at considerable distance apart. The farmer has nothing to do but girdle his trees and enclose and plow his ground. With one yoke of oxen he will seed down forty acres the

first year. We had a tolerable road for the rest of the way being chiefly over the plains with here and there a spot of corduroy and a comfortable deep mud hole.

PONTIAC

Pontiac, at which we arrived late in the evening, is a small village of about 50 houses in the precincts of the village. The country was settled the earliest of any part of the territory back from Detroit. The farmers are generally in good circumstances, that is, they own their lands (which cannot be bought on a credit). Many are wealthy. There are five lawyers, a Presbyterian clergyman, who preaches in the court house, an excellent flouring and saw mill and a small clothing shop which does business to the amount of about \$1,000 a year, the last \$1,500. Abundance of water privileges. This part of the country is covered with small lakes and it has been and is considered one of the most unhealthy places in the territory. There is one physician about 40 or 50 years old. A man of good talents of bad morals and beastly habits. He is very intemperate, is rough and uncouth in his manners. As ugly and obstinate as a bull and a professed atheist. A man looked upon as very good for his professional acquirements, feared by all and hated by the most of his present employers. He has been sick most of the summer with delirium tremens and the rheumatism and at present is paralytic in one foot. Drunk half of his time. A considerable property acquired by his profession and a very agreeable and large family. He at present attends to business and does what little there is. From all these circumstances and the pledges of many of the best citizens I have concluded to settle there. The least for which I can obtain board and washing is \$2.00 a week. An office, \$35.00 a year. A horse that is good for anything 50 or 60 dollars. English horses are worth 100 to 150 dollars. A saddle \$20. Oats and corn 3/n a bushel. Prairies hay \$4.00 to \$5.00 a ton. Rice 3/5. Wheat 4/n to 4/6. Wood \$1 to \$2.00 a cord. I shall not purchase a horse until spring as there is nothing to do until next summer. From June to October is the sickly season. Transportation from this to Pontiac is by the stage \$2.00. All baggage over 15 lbs., 88 cents. By the waggon I can send my baggage for 5/n a hundred and intend to walk out on Tuesday for I dare not venture my neck in the stage again and can go it in less time. The rate of charging is high. For visits and med. in Pontiac the least that Doctor Thompson charges is one dollar. Mileage 2/n. Where he goes from eight to twelve miles \$2.00 whether he leaves med. or not; over \$3.00 a visit. Consultation five dollars. Obstetrical cases five dollars whether he goes one rod or fifty miles; after visits extra. Bleeding fifty cents at the house of the patient. Office 25 cents, same for Ext. Dentis, 12½ to 25 for cathartics, 2 cents for a pill of any kind.

The people are rough as Tartars. The majority intemperate, all or nearly all drink some. They have been and the mass of the people here now are the most wicked set that ever lived in the U.S.A. Three-quarters are infidel in their sentiments, at least of the first settlers. This class in the wilderness and their successors are sturdy and Oakland county are rapidly dying or clearing to respectable emigrants from Vermont, New York (Pennsylvania?) and Ohio. Government lands are worth \$1.25 an acre to take your pick in any part of the territory. Speculators have bought up the most desirable locations and lands under

improvement sell for \$2.50 to \$5.50 an acre. A pair of horses that can do farm work \$150. Oxen 60 to 70 dollars a yoke. Pork \$5.00 a hundred. Beef \$3.75 to \$4.50. Butter fresh 1/6 to 1/8. These are considered the standing prices the year round. Little is exported, being consumed by emigrants. My sketch of the country is necessarily imperfect as I have not been off from the turnpike and returning by night I have but one view. I calculate to make a critical examination when I walk to Pontiac and while I am there and the result you will have in my next. Therefore place no great dependence on the present cursory, perhaps incorrect statement as to the face of the country; the rest I have obtained from observation and information from good sources. You must not let any but the family examine this, fatigue must be my excuse for the manner and matter. Recollect me to enquiring friends, etc. It will be unnecessary to the family as it is intended for all though directed to you.

Yours, etc.,

D. L. Porter.

Pontiac, December 29th, 1828.

Dear Brother:

I commenced a letter to you some days ago and it contained much good advice relating principally to your negligence in sending papers to me. I cannot even now give you much credit as I have received but one letter, and one paper from you. If it is possible send me some paper from our section of the country regularly, and I will forward my North Western Journal regularly. You may perhaps obtain more correct information as to the actual situation of this territory, than it would be in my power to give for several months, as I am almost entirely dependent on travelers and the newspapers for what information I obtain. At this season of the year we have to place reliance on the papers of the day. After November the traveling season closes in consequence of the bad roads until the middle of January. Do you recollect the parable of Dives and Lazarus—and the gulf attended to there-in. Such at present is our situation. Six miles of the road between this and Detroit is almost impassable for foot passengers and a loaded wagon is out of the question. For the last month the weather has been as warm as it usually is in April. A great deal of rain has fallen and it has not frozen ice one-half an inch thick. (Our streams have been all frozen over once but broken up again). The roads are very deep muck in the wood land and are far from good in the plains or oak openings. The game which has been heretofore plenty is almost annihilated by parties of strolling Indians of the Saginaw tribe (400 or 500 have passed through the place since I came here), who depend on it for subsistence, their corn crop having failed the last season. Partridges and quails are however very abundant. As you go west the game is more abundant.

What an indefinable thing that word west is. When I came to this country I supposed that I was on the very edge of the civilized world. I have as it were but arrived at the threshold. West of Lake Michigan the white inhabitants numbered 10,000 last spring and the settlements extend several hundred miles west of this place, and petitions are already afloat to have a new territory set apart embracing those settlements in its bounds. A resolution approving of such a course was passed by the last Legislative Council and a committee appointed to make a draft of a petition to Congress. I find that I knew nothing

of the situation of this country and had as indefinite an idea of the resources of the country, the manners and customs of the people and the advanced state of agriculture and the arts, as I had of the inhabitants of the moon. I have no doubt that this will one day be one of the greatest agricultural and manufacturing countries of the Union. Owing to the mildness of our winters sheep and all kinds of stock propagate and thrive beyond conception. The expense of keeping sheep is nothing during the winter season and there is nothing wanting but an increased supply of wool to start machinery for its manufacture in every part of the territory. There are abundance of men able and willing to embark in the business as soon as the times shall warrant it. This village would offer as fair encouragement as could be asked by an enterprising man. Water power is abundant and there are constant calls for an increase of machinery to do the work for the farmers of this part of the country. The cloth draping establishment in this place has two carding machines, two Jennys and two looms constantly at work and the man cannot attend (though a real driving fellow) to half the calls for work. The man who built the grist mills, saw mills and triphammer in this place died last summer and the whole are to be sold at auction in the spring. It would be a grand chance for Mr. Hawes or Sprague or some such men, as it will be a great speculation. Doctor Chamberlain who has had the charge of the grist mill for the last six months has cleared between five and six hundred dollars and has not been confined to it either, and what is more, knowing nothing about the business. It has two run of stones and any quantity of water and for five hundred dollars lain out in the dam and digging a ditch across a neck of land near Mud lake, can be made to carry 16 run of stone. Every half mile, for five miles an extensive mill might be erected. We are on the highest table land with one exception, in the northern states. The streams run in every direction from this county; our extensive lakes supplying the head waters. The Clinton, the Flint, Huron and Rouge head in this county or near its lines.

But I must for the present proceed to other matters. Did you ever dream of my finding a nineteenth cousin in this country? It is a fact, however, having been claimed in that or some other degree (I don't recollect the names of the different degrees of consanguinity and not having a bible handy am not able to define the present one,) by Archibald Philops of Nassau of this town. He is a nephew of Grandfather Lawrence and either a cousin or brother-in-law of Uncle Lionel. Aunt Ann I think is a sister of his. He has lived with Uncle Lionel and has visited at grandfather's and at father's. He was at father's during the late war and has told me of a wounded man who was under father's care at the time. He may recollect him by the time and circumstances. He is a man of Uncle David's size about 35 (I should think by his looks). He is a good looking man and the best dressed farmer in this county. He came to this country about eight years ago in company of one Williams, purchased a lot of land containing about 600 or 800 acres of land. On it they erected a saw mill, which is considered the best and does the most work of any in this part of the territory. It is eight and one-half miles southwest of this place on the Saginaw turnpike (so called though nature did the work and that well, too). It is the handsomest farm I have seen and on it is an extensive

pinery which in this country is very valuable. Williams is dead. His half part of the mill and farm is to be sold at auction in February or March and is estimated at \$1,200. That sum has been repeatedly offered for it but by the law it has to be sold at auction. Phillops, after paying his debts, will be worth clear about 1,200 or 1,500 dollars. He is lately married, what luck he has had I cannot say. His wife is a good looking intelligent woman, further I know not. I have been there twice. He lives in an old log house which is neat and well furnished. He has an excellent barn and a good share of stock for the country.

CHRISTMAS

I really wish that you could have seen our Christmas celebration in this town. Of all motly assembly! You never saw the like. It is general holiday. The first thing was to call out the sharp shooters to wreak their vengeance on the turkeys. They were set up at 25 rods, sixpence a shot at arms and there were some of the greatest marksmen I ever saw. One man bought twelve shots and the contract was that if he did not strike the head or neck, even though he killed the turkey, it was to be considered as lost to him. He struck the neck nine times, the head once and the body twice. Many of the marksmen killed at every shot. After shooting they went to gambling and drinking, singing and dancing. You can form no conception of the scrape they had. It is utterly out of my power to give even a faint outline of the proceedings. The scrape was kept up until Sunday night. I thought that many must have killed themselves but to my amazement there was not an accident, nor a single dead set battle, nor any violence though I think that many will feel the effects of it for months if not for life. Many lost a great deal of money. One young man set up his farm at rush for 500 dollars and took a share in. He won it back and set it up again for one-half and lost that and before night every cent he had in the world. Such are the people who are pioneers in a new country. Slaves alike to the soil and to their passions. They are however, a transient class. They soon fall a sacrifice to their excesses or when broke down retreat to the western wilderness again to gain and again to loose; there being no such thing as reformation.

I have had but little business since I wrote last. One call which ought to have stood me twenty dollars cost me four or five besides my time and labor. I was called in council to Hoxies Settlement 35 miles northeast of here in Macomb County with Doctor Jennings, a graduate of Burlington in the days of Smith and Porter. It was a case of typhus and the man died 12 hours after I got there. I was detained one day by my horse being sick; the man who died did not leave enough to bury him and I had the pleasure of being gone three days, paying one dollar a day for a horse and keeping him during that time.

HORSE COLIC

The owner of the horse swears that he will sue me for damages to his horse, but I do not think he will as Doctor Jennings has sent me his affidavit and also another man that the horse was well and free from sweat when put in the stable at night but that when I started the next morning for home before I got fifty rods he fell down, apparently with the colic, for which there was no evident cause. I can also prove that the horse has been subject to such turns and that the owner has sponged twenty dollars out of one man and

ten out of another for a like accident to the same horse within a year. I have notified him of these facts. What he will do I cannot say. At present I have not money nor credit enough to raise a horse (\$50 to \$70), saddle (\$25), and bridle (\$3 to \$5). Doctor Thompson has been very particular in warning everybody against me as a quack and swindler. The first I have disproved by my papers and practice, the second I must leave to time to develop. I am determined to stick to Pontiac through evil and through good reports. I know I can give the Doctor a pull as he is most heartily hated. One man, an enemy to Thompson and in my esteem no friend to me, offers to let me have one hundred dollars if I will give him my judgment bond for one hundred and fifty with interest and an execution on my horse and books and medicine. I have thanked him for his kindness as I ought but have concluded to wait patiently until spring. My stock of medicine will last me several months and LeRoy will accommodate me with board at his own risk but is so far prejudiced by Thompson that he will go no farther. I have paid the \$20 rent on an office for six months in advance and what money I have will pay my horse hire until I shall be able to get a horse. Twelve families have given me their public pledge that they will give me their business for one year at least, but I have to take my pay in grain or dicker as it is called, a year from this time. Which is the only season for paying debts in this country.

A MEDICAL FIGHT

Thompson having quarreled with all the neighboring physicians, they have one and all pledged themselves not to call on him in council and have proposed to me to act as consulting physician, which I have engaged to do. I have not seen Hays for some time, he is raving mad because I would not commence a partnership with him at Ypsilanti. I consider myself bad enough off now but that would have been ten times worse. Philops likes his cousin and swears he will do what he can for him and does so, but is in no situation at present to back him in getting a horse. Him, I believe, for I know he is in debt and as money is scarce he slaves like a dog at his mill and farm to clear himself, which, if nothing happens, he will do next summer. I find that he is a real industrious fine man.

HAPPY NEW YEAR

January 1st, 1830. A Happy New Year to all of you. I was woke about an hour since by the yell at my door of some ragged, wild looking urchin, of "A Happy New Year, Doctor." I got to the door and thanked them, they were not satisfied with that, however, and one of them said "that dad had told him that I was a Dutchman and had oceans of hot punch and cake and his object in calling was to partake of the good things and he would be damned if he did not have some and Dick wanted some too. I found that I could not be rid of them by fair means so I resorted to the earnest and gave them a chance either to clear out, take some yalop or a cowhiding. To my utter amazement one chose the yalop (not knowing what it was) I mixed it with some water, he ate some but concluded he had no "further occasion," decamped with a yell and followed by his companions who promised not to trouble me for devils milk again in a hurry. I see the crowd begins to collect at the tavern opposite already and from the appearance of things they will probably have as great a spree as on a

former occasion. You may be surprised to learn that it is but 8 o'clock and I writing a letter. Do you recollect my expressing a wish to have the ague for the sake of experiment? I am satisfied for I have it with a vengeance every other day, at precisely 12 o'clock. It is not like our ague. It makes me shake like vengeance, but does not last over two or three hours when I am able to resume my books or ride or whatever else I feel disposed for the moment to do. The chill is very severe, but the other stages amount to nothing and when over I feel no bad effects except a general soreness for a few hours. It is probably occasioned by the very warm weather and the draining the mill pond to repair the dam. Almost every person in the village has it, but they never do anything for it as cold weather will stop it. I have had four fits and expect one today. I shall leave it to take its course for a few days longer when I shall have to try calomel for a few days. The ague is looked for regularly and receives as little attention from the inhabitants as the change of seasons. I have one case of pleurisy on hand. It is a new settler and whether I shall ever get my pay is uncertain. He shall have a chance, however, for he won't die this trip. My prospects grow more encouraging. I wish that some of our young farmers from Saratoga who can raise from three to five hundred dollars would come out and view this part of the territory. They would be delighted with it and could in three years double their money and in ten be wealthy. I cannot learn a single instance where a man came in with industry and economy, who at the end of five or six years cannot raise from one thousand to ten thousand dollars. Such men as the young Backers and Traverses could not but do well. They must always be cramped there while here with 500 dollars they would be independent and would not have to work so hard as they do now. Mention it to them if you think of it, but don't tell them that it is unhealthy. In truth, it is not more so than the western part of New York and the whole of Ohio. They must have money as there is no credit in this country for lands and they must have great confidence if they can get (?) provide the necessarys without it. For that reason I like the country. Every (?) who occupies a farm can pay you his bill, though only in the winter season and generally with produce or with his note on interest which passes about as readily as the cash. In fact I would as leave hold one as the other if the signer is known to be a farmer. Mechanics are very much needed and are paid extravagant prices for their work. A good toiler would have as much as he could do all the time and receive Troy and Albany prices. It is the same with the shoemaker. A good one could keep five or six journeymen at work. There is also a great chance for another blacksmith. All our mechanics have more than they can attend to and a tanner who understood his business could clear four times as much as he could with the same capital embarked in our village of Waterford, as raw hides sell very low and tanned leather is higher than with you. He could also buy a great abundance of them. Bark is low and he could grind it by water power. If he felt disposed he could purchase 50,000 deer price he chose to ask.

There are several wealthy men coming in next season, they have purchased village lots and some skins in a year and pay for them in leather at any have contracted for buildings. What they are going at I cannot learn, let it be what it may,

they are welcome. Thompson and me closed accounts yesterday, he said that it was always good policy to work off the bile at the end of the year. He raved like a mad man and I laughed at him. I found afterwards that it was his determination to quarrel with me and then make peace and form a partnership. I will see him, as he wished me d'n'd first. A partnership on no terms shall be formed now, as he has acted like a scoundrel. By his violent and unmanly conduct he has long ago excited the contempt and hatred of many, and his present course is far from a soothing one. I shall eventually root him out; root and branch, if he does not go to his majesty on a whiskey barrel first. The greatest misfortune I have to contend against is the coming in here after two real scoundrels had to decamp. They both did well for a year or two but became dissipated and shaved all their creditors and friends, out of their demands. The people still feel sore and are very much on their guard and their fears are kept alive by the bold assertions of Thompson. The course he pursues is the very one which I could have wished, as I might not have been known for a good while, but now I am known personally, or by report by every person within ten miles of this. Augustus Porter has done me a good turn also and without my asking it. He has written to many of the leading citizens, I find, in a flattering manner and the way I learnt it was by receiving invitations to their houses as a friend and several showed me the letters. It is more than I had expected of him as he is a cold phlegmatic fellow. I had a letter to him from Mrs. Closes friend at Buffalo and also to several other gentlemen at Detroit who have treated me with great politeness. My calculations on eventually settling in Detroit are lain aside in consequence of the number of physicians compared to the population and wealth. When I leave here it will be for the east or south, though I am confident that in five years I shall be independent here if my health holds out.

Yours, etc.,

D. L. Porter.

The thermometer has stood for the last three days in the afternoon at 60° to 71°. This morning it is cold and freezes, the first time for three weeks. The change has been very sudden and I think will occasion me some business as the people for some time back have grumbled about their sides and backs.

Pontiac, March 1st, 1830.

Dear Brother:

I received your letter containing the Post note last week, for which I am very much obliged to father, etc. There is nothing of a very interesting nature in the letter excepting that and the tender of your services as groomsmen in case of necessity. I fear that if you defer visiting this country until such time as you receive a formal invitation to attend my debut, the day will be "lang and Sare" before I can welcome you to this earthly paradise.

DEBUTANTES—WOMEN

I have not as yet seen the young lady in the territory whom I would take for better or worse for her weight in gold. The majority are lamentably deficient in either natural or acquired graces. In the rich and harmonious vocabulary of the Kentuckian, they are half horses, half alligator and the rest made up of the well known properties of the wild cat and snapping turtle. There are many who would be ornaments to any society

if they had the advantages common in our own section of the country. You must therefore select one for me in old Saratoga against the time that you think it would be best for me to play the fool.

Business is improving. In the last month I have charged \$45.00. Ten of which is good for nothing. I have entered into a partnership with Mr. Beach in the druggist business. The contract is in these words. 1st, Elisha Beach to procure a suitable building which he shall supply with all necessary furniture, drugs, medicines, etc. 2nd, In consideration of the occupation of said building free of rent D. L. Porter shall dispose of the stock furnished to the best of his ability, for the exclusive benefit of said Beach of which he shall keep a regular account. 3rd, The drugs and medicines used by D. L. Porter shall be allowed 4½ per cent on all sales of patent medicines, secret remedies, specifics and compounds manufactured and sold by him for said Beach as a compensation for his time and labor. 5th, The above contract to remain in force until such time as D. L. Porter shall pay to Elisha Beach a sum of money not less than one-fourth, nor to exceed one-half of the capital actually embarked in said business. After which he shall be entitled to his proportional share of the expenses. I have taken possession and the business goes on well. I like the terms as I am not confined at all, he tending shop while I am off about my business.

I have written to Jas. Riley at the request of Judge LeRoy and Mr. E. Beach, to propose to him to come on and take charge of their mills, etc., which they have purchased on the Thread river, together with a village plot. It is a great speculation and will be very profitable. They want a man whom they can trust and who will be willing to take charge of their concerns. I recommended Riley and they authorize me to say to him, "Come and see for himself. If he is satisfied, embark whatever capital he pleases or they will hire him and he can become a partner at such time or on such terms as he pleases." Let him come on immediately with five hundred or a thousand dollars and go into partnership. If he prefers it he can go into a partnership with several responsible men who cannot attend to their mills in person. I want some man who will oversee. That is the situation of three mills in this township, any one of which will be profitable. Mill Wrights and all kinds of mechanics will find plenty of employment next season. If any feel disposed they can take contracts on the United States turnpike next season and will make money. The 17 miles which were completed last season was very profitable to all the contractors. Speak to Sprague and to Mr. Hawes or any other such men and tell them the situation of the country. There is a new woolen factory going up in the spring here. They are getting out the timber now. Has Howland got any steady industrious journeyman who understands the wagon maker's business. If he has tell them to come on. If Riley (he will refer to you for information) comes on he had better start as soon as he can collect his money. If he was to bring on a good span of horses he will dispose of them to good advantage. Tell him not to wait for navigation, but come by land and go by land through Canada by way of Lewiston. That route will not cost him more than to come all the way by water. Besides he is wanted early in the season and he cannot get here until the last of May or first of June if he waits for the boats.

Phillops has married his with whom he

has lived for five years in defiance of public opinion, during which time she has to his knowledge had intercourse with other men. He is run down by her relatives who are poor, miserable wretches, who have frequently fallen under the lash of the law for their errands. He supports them, pays their debts, law fees and fines. He is going to ruin as fast as he can. His character and credit are now both lost and is not allowed to hold intercourse with any one but his wife's relatives. I find he is very much involved and Uncle will lose his debt if he does not attend to it soon.

Young LeRoy intends to take a tour to the east in the spring and says he shall visit Waterford. Entertain him well. He is simple and ignorant and has a great curiosity to see the curiosities of the east and to visit the factories, etc. His stay will probably be short in that country.

The hint on the envelope of the Journal was occasioned by the writing on the first Sentinel which I received. It related to Mr. Givens Death and was done with ink. The Postmaster saw it and requested me to inform my friends to write their obituary notices in a sealed letter or wait until the papers published it. The solutions which you use are not clear enough and leave a yellow stain. Be more careful in preparing it and use a clean pen. I do not receive one-half of the numbers of the Sentinel. It is nearly three weeks since any came and those before were odd numbers. Hint to the Postmaster to be more particular or think of enclosing them more regularly. You will cut off and file the note at the bottom. Give my respects to my friends.

Yours respectfully,

D. L. Porter.

W. P. Porter.

Pontiac, May 2d, 1830.

Dear Brother:

You perceive by the dates of my letters that I stick by in promise to write by the first mail of every month. I feel in better humor for writing now than usual from the improvement of my business and prospects, and not of mine alone, but of the whole county. Since my last letter there has been but little sickness until within a few days. My charges since the 23rd of April have been \$31.54 and I have two patients to visit out of town besides three that come to the office. Great fears are entertained throughout the territory (this of course must not be hinted out of our own family as it might deter emigrants), that it will be the most sickly season that we have had for some years. I must confess that from present appearances it will be the case; if my suspicion should prove correct I have no apprehensions for myself on the score of business. For myself I never was in better health or spirits than I have enjoyed since the first of February, and all that I ask is to have it continue until the first of October, (the end of the sickly season), then I care but little what comes. I have enjoyed myself greatly since the first of April in riding over the country and seeing the immense improvements in the farming department; ever since that time the farmers have been breaking up the openings which is done with great ease and rapidity. The last month was warm and pleasant. A great many wild flowers were in blow in March; on the 15th of last month I saw peach, wild plum and crab apple trees in full blow. The gardens about the village are very early, more so than I recollect seeing them at the east. The woods are generally leaved out and

we have elegant pasture over the whole country; in the meadows the grass is six and eight inches high, when of its full size it is from four to six feet.

During the month of April we had a great many fires in the woods. The hunters set fire to the dry grass and leaves, and old logs, dead trees and most of the small brush is burnt clean. The fire seldom attacks the large trees, only consuming the under brush and this occasions the openings which are the greatest ornaments to our country and have excited the surprise and admiration of all strangers. The hunters' object is to encourage a rank growth of grass to improve the hunting of deer etc. These fires excel in beauty anything that I ever saw during the night. The light is very vivid and appears to dance about amongst the trees and assumes the most fantastic forms, rapidly moving along and changing its appearance. The spectator who is not accustomed to these scenes would almost believe himself in fairyland.

The prospects of our village, county and territory are very cheering. The increase of our population will be greater than in any preceding year. The tide of emigration has again set towards the territory. The emigration mania or fever is prevailing very extensively in the western part of New York, in all the middle states and most of the eastern states. There have been pioneers from every section of the middle and eastern states to examine the country. I am not aware of an instance in which they have returned to their friends without purchasing a lot first. An agent for a society of Quakers in New York State has purchased an extensive tract about twelve miles from here on the Saginaw road. They are expected on with their families in the early part of the season. Six wealthy families from Genesee County are now on their way for this village. They will be here this week. They are all men of business I understand—whether merchants or mechanics I have not learned for a certainty. Several new buildings are now going up in the village and a meeting of the citizens is to be called in a few days to take into consideration the measures to be pursued for building a church and an academy. There are some lands in the vicinity the proceeds of which are appropriated to that purpose. Business of all kinds is very good at present, and will increase next month. In June the Indians go to Malden in Canada to receive their presents. All the Indians in the territory except the extreme south part, go through this place. (Pontiac being the old head quarters of all the tribes, and they still appear to regret the necessity which compelled them to resign the most delightful part of their dominions endeared to them by numberless associations of family, friendships and feuds of savage massacres, and inviolate treaties (like those of the whites) made to trample upon in violation of the most sacred pledges of fidelity).

During their sojourn the merchants purchased immense quantities of the most valuable furs and skins and pay for them in goods and whiskey at an enormous price. (By the by, it is worthy of note that these same Indians receive presents from the American government).

From the middle of July to the middle of October, business is comparatively dull (yet in Waterford it would be called brisk even then) in the mercantile department, though all others flourish, if possible, more than ever. You will notice the puff in the North Western Journal in relation to Saginaw. (I call it a puff, if it was

not for the bad appearance which a letter makes when a part is erased by xxxx I would surely give it a daub). The statements in that are all correct which I can certify from personal observation. The village of Le Roy is the one where I wanted Riley to go, but the time having passed over which Messrs. Beach and LeRoy engaged to wait for an answer from him, the situation has been given to another. Its location is similar to that of Waterford at the junction of the Thread and Flint rivers. In the course of a year or two it will be a fine location for some of our young men who want to go into the mercantile business, and there are a great number of Indians in the vicinity who do all their trading at that place and is now very profitable to Mr. R. Stevens, who has the command of the whole. At present I do not think it would warrant an opposition.

By the bye, do not mislay that note of father's, for if any accident should happen to me such as taking a check on the tow path, it will be the only means of saving any of my property here. They are the greatest hands to administer on the estate of a stranger that I ever heard of, all the property being consumed in fees and costs by the estate great or small; (it is conducted in the same manner as in the southern states. The amount of my charges until yesterday was \$225.32 and all I owe is about \$20 to Judge LeRoy for board. Everything that you have done here is very high and expenses are great in the village, but I continue to keep all within my income. Doctor A. L. Hays has failed (from such good fellows, Lord deliver me!) He owed the Monroe bank about \$300 and all his real and personal property was pledged to his smouseing (or carousing) friends (who lent him and offered me money at 25 per cent). He is sued in the U.S.A. Court and how he will get out of the scrape I do not know. I am sorry that he was such a foolish calculator and have no reason to repent my keeping clear of a partnership with him. He has fallen in love with and proposed matrimony to every pretty girl he saw who had any property, and has been uniformly refused; he is now laughed at and ridiculed by everybody without mercy, they considering him a mere fortune hunter. I have had a letter from Robert LeRoy, who from the hurry of business and anxiety to get home, had given up the plan of visiting Waterford. Mr. Elisha Beach has started for New York for dry goods and drugs and medicines. He has taken father's address and intends to visit Waterford if he can spare the time. If not he will write to one of you from New York about the first of June to meet him at a particular day and place in Albany, when he will attend to any commands from you. I requested him to do it in the hope that you might send the grape roots, seeds, etc. by him. Keep the roots packed in moss (until?) you hear from me again. He may disappoint you, but at (that?) they will not be lost to you, if he should not come. My anxiety to receive them is increased by having the offer of a village lot lease for five years free of expense on condition that I cultivate it. I have had it plowed and spend an hour or two after sunrise and after tea in it every day. It is too hot to work in the middle of the day, aside from the necessity of attending my professional business and reading. I shall have an elegant garden and it is directly opposite to the office.

I cannot but admire your taste in selecting a "cara Sponsa" for me and the only thing that gives me uneasiness is the suspicion—the mere

suspicion that I might differ a little from you in relation to her qualifications. I hope that you will at least select a little better for yourself for I doubt whether those delightful traits of character which leads you to suppose that she would be proper for me, could recommend her much to either of us, or to our friends. How does your patient at the half way house come on? I think that it is almost time for convalescence.

I have marked some beds of splendid wild flowers to send home for Abbey, Mr. J. S. and W. L. All that I fear is, least Abbey in attending them, shall find occasion to use a little touch of "Rouge." If it should be necessary for her comfort, I will send her a pattern of one of our bon ton ladies of the forest, who have a peculiar taste in painting their faces and would at least attract some attention in Waterford.

Next time you write recollect that I have some curiosity to know what is going on in Waterford and how our friends do. You have left me to infer that our own family were well and I am indebted to Laura and Abbey for the first direct information for which I am very grateful. I have no room for separate postscripts; indeed, I think it is unnecessary as my letters are intended not only for father's, but Mr. Scotts and Strachan's family. Also recollect me to my friends (real, I mean), perhaps it includes inquiring.

Yours, etc.,

D. L. Porter.

Pontiac, August 10th, 1830.

Dear Brother:

Were it not for fear the family might still feel uneasy about the consequences of my seasoning, I might be tempted to wait a short three months as you did, without writing to you, or giving you the least hint whether I was compos mentis or still breathing the foul air of this earthly paradise; (foul only to the new comer, recollect). I must indulge in egotism therefore to commence. Firstly, my health has greatly improved and with it my spirits. That nervous irritation (I must indulge myself by christening it with a soft name) has in a great measure subsided and I can meet my bitterest enemy without feeling the least fluttering of the heart or swelling of my throat, sensations which made me miserable when indulged and at the same time for several days utterly beyond my control. "Black Bill," as he is called, alias, Doctor T., continues savage because I would not be salivated or die; nor salivate or kill any of my patients, which, thank God, we have not found necessary in a single case, as yet, whereas he has salivated all of his and out of seven cases of fever has lost three. In his wrath he has opened an opposition druggist shop. He damned Judge LeRoy the other day for introducing me here, as since the sickly season commenced he had not charged \$300, whereas ours since the the second of June amounts to about \$500. Business in consequence of the rains has not been as good for the last week or ten days; our daily charges average from 8 to 12 dollars—during our harvest time it would sometimes go as high as 30 dollars.

I have tried for a horse but do not succeed in getting one, as they want good dicker or money. For the present I hire one at \$1.00 per week and keep him myself and have to warrant him in the bargain to be returned safe and sound. At present good horses are very scarce and command a high price. I pay a high price considering the expense of keeping one, but it would cost me from 4/- to

8/- per day if I did not hire by the week and I must have one at my command.

Emigration is still the order of the day and great numbers are flocking into this part of the country—many of them wealthy. Riding through the woods in any direction you find people hunting lots. Oakland County and Saginaw are the order of the day with settlers. What is the name of Austin's brother-in-law and what town is he in? Your account is so indefinite that I am at a complete loss. Powers' brother I have not seen. Ypsilanti is forty miles across the country, 75 miles to go round by Detroit. I never have been there but intend going as soon as business will admit. Doctor A. L. Hays is recently married to a young lady in his neighborhood. William Dennis was here about a month ago and stayed about three days. I never suspected such a thing as his being in want of business. If he had given me the least hint I could at that time have got him into Seth Beaches store at Auburn, as they were in want of a confidential clerk; the old one having left them. The place is now filled. When he left here he concluded to go to St. Josephs, about 200 miles west of Detroit, on Lake Michigan. If he was not suited there (in what respect he did not say) he should go on to the lead mines on the Mississippi and perhaps return to Green Bay. If he is limited in his means and does not get into some kind of business I fear that he will enlist as a common soldier at Green Bay, as there is nothing to induce such a course. His mind appeared to be fully made up as to his future course; and he did not appear near as cheerful as formerly, though in good health. I learn by enquiring that he left Detroit about 3 or 4 weeks ago. He has promised to let me know where he settles and describe the country, therefore say nothing to his friends further than that I have seen him in good health at Pontiac, until I write again.

Wish John Cramer, 2nd, joy from me for being delivered from a living curse in the person of Miss Mary V....., as also for his success in business. I wish I could order you to do the like by Ellis on the first point; though don't forget the latter. I do not feel any surprise at your account of the Peebleses.

You mention some local political squabbles which are disgraceful. Old Saratoga ought, and I hope will be forever and a day politically damned (in plain terms) if she sends J. Cramer to Congress in preference to J. W. Taylor.

PRACTICE QUALIFICATIONS

You enquire what are the legal qualifications of a physician in this country? They are to pass an examination before the censors of the territorial society and before they can proceed to do that he must show the degrees of M.D., a license or a certificate of study for three years, if of a liberal education, four if not. Those presenting a degree seldom have much trouble in passing, but woe to the licentiate of the foreign student as but little mercy is shown to either. The cost is about \$12, if you join the Society, which is expected. Encourage none to come, as 99 out of a hundred will be disappointed as there is not a Pontiac at every door. Our profession is overstocked in the territory and this summer more than 40 have gone away in disgust.

If you ask on your own account I must first ask what is the state of your health or is it on account of it that you propose the question. Our climate is warmer than yours and idiopathic affections of the lungs unheard of, except pleu-

risy. A physician, to obtain a support, must four months in the year undergo everything but death. You must go almost altogether on horseback and contrive every way to save distance by following Indian trails or for want of these cutting through the woods to save distance frequently 30 to 50 miles per day and still have to go from morning to night. We think nothing of riding 15, 30 and 40 miles to see a patient, sometimes 80 to Saginaw, (as the settlement has not and cannot support a physician). With a congenial climate and extremely fertile soil, we have all the dissipation of the south and our expenses are equally great. Should you desire a change of climate go further south, where you can live better with less fatigue. Next spring perhaps I shall visit Waterford in March or as late as April. If you feel disposed to return with me and see how you like the country. You can do business enough during the summer to support yourself handsomely and if you say the word we will steer for New Orleans or some of the towns on the Mississippi on the 15th of September or 1st of October. Explain your views and I will arrange my business accordingly. I should like a warmer climate even than this and I know that I can make ten times the money though it may go as it comes, "easy".

Archy Phillops is doing well today. I took off his splints. Child has a severe intermittent fever inclining to the remittent. The friendly duns I mentioned in my last still cheer me in my hours of relaxation, with at last a proposal to join issue. Recollect me to all our connections and enquiring friends.

Yours, etc.,

D. L. Porter.

W. P. Porter, M. D.

(To Be Continued)

TUBERCULOSIS AS A SYSTEMIC DISEASE

PROF. ERNST LOEWENSTEIN, M. D.

VIENNA

Villemin the discoverer of the contagiousness of tuberculosis already proved in 1869 that tuberculosis bacilli must circulate in the blood of advanced cases of tuberculosis.

Robert Konig, the famous surgeon, assumed in his classical work: "Tuberculosis of Bones and Articulations" that the bacilli must circulate in the blood vessels again and again, without causing miliary tuberculosis. In 1905 I published a paper on Septicaemia in tuberculosis, in which I proved the truth of this view by experiments and I discussed the question of septicaemia very thoroughly.

We know today that we were on the right way. It is sure that bacilli may circulate in the blood without causing miliary tuberculosis; surely we must recognize and acknowledge a border between miliary tuberculosis and bacillaemia, but we must also not forget the identity of genesis of both states. A miliary tuberculosis be-

longs also to the circle of tuberculosis bacillaemias, it is a kind of bacillaemia. I believe that a condition of miliary tuberculosis is only given, if the intrusion of the tuberculosis into the blood vessel occurs again and again. That this repeated influx is necessary is proved by the various phases of development of the tubercles. They show various ages. We must limit the name of miliary tuberculosis to those forms of bacillaemia which result in macroscopic lesions. The greater part of pathologists speak of miliary tubercles only in those phases, where they can see the tubercles with the naked eye. There are however some border-line forms, to which we reckon the sub-miliary tubercles. You see that there are only quantitative differences. We are certainly not able to find the tuberculosis bacilli in the blood in every case with our present methods of examination.

Were I to report upon the results of the most reliable methods, as for example the infection of guinea-pigs, I could summarize as follows:

First stage, 2 per cent; second stage 10 per cent; third stage 30 per cent of the cases show bacilli in the blood. But those figures give no true picture of the real condition, because our methods are as yet insufficient.

The guinea-pig is not an absolutely reliable indicator for the infection with a few bacilli, especially if its resistance is increased by the simultaneously injected blood. In order to understand the pathology of tuberculosis, we have to combine the experience of the clinic with the autopsies, and the bacteriological examination.

Clinically, we know that every one can get a metastatic tuberculosis, despite a feeling of absolute health. Every one of you know a lot of cases, who get a manifestly metastatic tuberculosis (eye, bone, kidney, testis, etc.) as a result of trauma. One of the cases I will never forget, was sent to me by Robert Kock himself. The man, a powerful naval officer was sleeping in his berth aboard his torpedo boat, when a porthole clamp fell back upon his testes. Thirty days later one testis showed sure signs of tuberculosis. After a short time the other testis became affected, despite the immediate surgical removal of the first testis. The vasa deferentia became affected as well as the peritoneum.

Eiselsberg demonstrated a second interesting case of tuberculosis of the elbow, who always got a new fungus of the bones,

wherever even a slight trauma occurred.

I was able to publish a paper on eight cases of tuberculosis of the testes in 1913, where the trauma of the testes was the cause for the development of tuberculosis. The lungs in all these cases offered no sure symptoms of tuberculosis. Such clinical observations have more weight than our experiments on animals. Those experiences in men are natural experiments in man, proving the fact, that the bacilli must circulate in the blood vessels—without great anatomical lesions of the lungs; I believe that an alteration of the walls of the blood vessels, perhaps sclerosis or, in the case of trauma a hemorrhage gives the opportunity for the development of single tuberculosis.

They grow in the extravasation as in vitro. Another proof, that this conception must be true, was found by accident.

Nather (Klinik Eiselsberg) examined the colloid tumors of the thyroids, extirpated in the klinik Eiselsberg histologically. In four of six cases Nather found tubercles in patients who never offered symptoms of tuberculosis, neither before the operations nor for a long time after the operations. Shimonoski made the same observation in cadavers; in 20 out of 26 cases the colloid contained sure tubercles.

But now I reversed the question, in order to become certain on the relation between changes in the lungs and metastatic tuberculosis.

I was sometimes embarrassed in consultations, when in such cases of tuberculosis of the eyes, the kidneys, tuberculosis of the bones, I was put before the question: is there a tuberculosis process in the lungs or not? I was compelled to answer: Surely, there is a tuberculosis in the lungs, but I am not able to prove it by our modern methods, a disagreeable situation for the consultant; but we can not be expected to hear grass growing.

Therefore I had to appeal to the autopsies. Now I had to go over the autopsy reports of cases with metastatic tuberculosis, i. e., tuberculosis of the bones and the kidneys and to copy the report regarding the changes in the lungs. Now it was surprising that in 60 per cent of the cases with tuberculosis of the bones and in 40 per cent with tuberculosis of the kidneys the report stated briefly, now tuberculosis in the lungs, or an old scar.

But a pathologist like I. Orth in Berlin had observed the same facts. Orth had the opportunity to make an autopsy in 16

cases of tuberculosis of the bones, which died of erysipelas and other accidental causes. Despite of his carefully looking for tuberculosis foci in the lungs, he did not find them. They had surely been there, but we know from Ghon's classical work that tireless research is very often necessary to find the primary focus. Such an autopsy needs two days sometimes.

You see how difficult it is for the pathologist to find in this metastatic form the tuberculosis lesion in the cadaver. One must therefore not throw stones at the clinician, who confessed openly, that he with his methods is not able to make a sure diagnosis in many cases. Here the biological diagnosis is deciding.

These simple, undeniable facts prove clearly, that the metastases in tuberculosis occur in at least 60 per cent of cases in short time after the infection; that means more often in early than in the later stages of infection. Now I tried to get an insight into the questions at which time the bacilli are already spread in the whole body. Only the experiment could decide this question. I infected guinea-pigs right under the nails with a subcutaneous injection of tuberculosis bacilli and removed the foot of the various animals at different periods of time in order to see within which time the guinea-pigs could be saved from generalized tuberculosis. The result was very clear. After 24 hours the bacilli were to be found in the spleen. In other words there was a bacillaemia shortly after infection.

Our next question is; What is the fate of these bacilli in the blood? They are spread to all organs. If there is a great number of bacilli in the blood, a miliary tuberculosis occurs. If only a few bacilli are present the organ of their deposit depends upon chance. We have to differentiate between organs sensitive to tuberculosis and those immune to the disease. We will occupy ourselves with the susceptible organs.

Our experience teaches us which organs are disposed to tuberculosis. If we make a scale of the frequency of the metastatic forms of tuberculosis we find that the bones, the kidneys, the eyes, the meninges and the adrenals, the testes, are the organs which are most frequently affected.

We tuberculosis specialists have to know about these protean forms of tuberculosis, and I was always deeply interested in all metastatic forms.

My experience in the latter types has taught me one sure fact, which I men-

tioned for the first time in a general way, when discussing tuberculosis of the eyes. This wholly neglected fact is the coincidence of several tuberculosis foci in the same system. Surely you will remember cases, which showed 2, 3 or 10 foci in the bones. I saw cases with 14 tuberculosis localizations in the bones, but I was not able to find any tuberculosis lesions in the lungs.

But not only the bones show this phenomenon. The kidneys react in the same manner. We know that the infection of one kidney is a great menace to the other. You know best how often the second kidney becomes tuberculous in time. We must not forget our experience with Addison's disease, where both adrenals are destroyed. And you are well acquainted with the fact that this destruction is largely a symmetrical tuberculosis, although often there are no, or very slight lesions in the lungs.

The same observation is true of the eyes. In 90 per cent of cases both eyes are affected. But we cannot discuss this question and overlook the skin. I examined the cases of our Lupus hospital in Vienna for open manifestations of the lungs, with the result that I did not find more than 5 per cent of cases with an active tuberculosis. But precisely in such cases it is easily to be observed that new lesions appear only and always in the skin. I remind you of the so frequently recurring tuberculids of the erythema nodosum Bazin, of lichen scrophulosorum (scrophulous lichen). Every form of skin tuberculosis involves a disposition susceptibility for new localizations only in the skin.

The best example of my point is of course the affection of the lungs themselves. Every lung tuberculosis involves a circulation of tuberculosis bacilli in the blood and yet only in a modest percentage of cases are any other organ systems affected.

I tabulated the case histories of 40,000 sanatorium cases of pulmonary tuberculosis and I found metastatic in but 1 per cent of all. In short one finds a far lower percentage than one would have expected.

If we look from this bird's eye at the tuberculosis problem, the observation that tuberculosis is localized in one system in the majority of cases gains in certainty. But we experimentors believe always, that we have to make it better than Nature.

Therefore I tried to imitate this experiment of Nature's.

The best example for testing this theory seemed to me the infection of the eyes. I infected series of rabbits in the anterior chamber and waited six months, the time necessary for tuberculosis to cause great destructions. Then I injected these rabbits and new ones as a control intravenously with more tuberculosis bacilli. The controlling ophthalmologist (Prof. Fuchs) stated that in the non-infected eyes a chorioiditis was beginning.

The second test-object was the kidneys tuberculosis. Guinea-pigs show as a rule no affection of the kidneys, though all other organs are severely attacked. Now we infected (one with Dr. Moritsch, assistant of the Klinik Eiselsberg) the kidneys of guinea-pigs directly after subcutaneous reinfection, the other kidney showed a lot of tuberculosis foci.

Another very interesting experiment was made by my pupil Nakamura, an otologist from Japan. He infected the middle ear in three ways: 1—Directly through the eardrum; 2—Operatively through the middle ear and 3—By injection into the carotid.

In every case the other ear was affected.

Sumiyoshi demonstrated the same sympathetic disease, when he infected one adrenal with tuberculosis. Of course the series of these experiments could be continued, but the experiments made by nature in man speak clearly enough. There are other analogies which allow us to bring this thought of sympathetic disease in tuberculosis in one line with our experiences in the one form of sympathetic disease we know to date, that is the sympathetic disease of the eyes, which as I remember even Meller, the successor of Fuchs, explained as a kind of tuberculosis.

And now I have experiments running on the same question, which will be finished after my return.

However, you will remember that the enucleation of the primary affected eye excludes the sympathetic disease of the other eye. In the same way as the extirpation of one tuberculosis kidney at the right time is able to prevent the tuberculosis of the other kidney. And Zuckerkandi told me that he had the impression that in cases with both kidneys affected the extirpation of the worse kidney had a good influence on the other.

In tuberculous infections of the bones I have the impression that the operation of the primary foci of the bones gives better results than our conservative methods. A

scientific statistic on a large scale would be necessary to clear up this point. It is not to be denied however that tuberculosis establishes itself in one system; but the explanation is not so easily given; in Europe the phrase "disposition" is much used for obscuring obscure questions.

Your famous pathologist Wells tried to gain a sure basis for the explanation of this so underestimated phenomenon, the thought of the possibility of an organotropism of certain strains of tuberculosis bacilli, but in spite of his efforts to cultivate strains with a special affinity for the kidneys, these experiments did not attain his aim.

In my opinion every system in our organism has an independence to a certain degree; I believe every organ system can reach alone in so far as regards sensibilization. Which facts speak for this notion?

We are able, for example, to increase the sensitivity of certain portions of the skin to tuberculin. If I repeat the Pirquet test in the same region of the skin many times, the sensitiveness to the tuberculin increases more and more until this region reacts to hundredth dose of tuberculin necessary for any other region. I can further remind you of the fact that cases of skin tuberculosis are unusually sensitive to the Pirquet test. It is entirely possible, that these observations serve to explain the above mentioned facts, that an organ system already infected offers a better basis for the development of new foci than any other tissue.

This sensitivity however must not be confused with immunity, for an organ system can acquire a sensitivity to a disease without respect to the organism but immunity, it seems to me, can be acquired only with the help of other organ systems.

There are two, perhaps three organ systems which have a very high resistance to tuberculosis. The first are the muscles, then also subcutaneous tissue and the thyroid gland. It is very seldom that we see any lesions in these organs. Even after the closest macroscopic and microscopic examination of the muscles and subcutis of cadavers of miliary cases, I was unable to find lesions, although all other organ-systems were heavily affected. When we inject dead tubercle bacilli intramuscularly or subcutaneously we are infecting highly resistant systems.

Our specific treatment of tuberculosis is then simply the process of infecting these resistant systems to force them to take

part in the general infection and in the production of their own powerful antibodies. I have always injected great quantities of dead tuberculosis bacilli intramuscularly or subcutaneously and have been able to produce all the microscopic and clinical symptoms of tuberculosis, which developed into a real cold abscess, which then penetrated and healed in 8 to 10 weeks with the blue scar, so typical of such lesions.

For what purpose did I risk such disagreeable accidents in my treatment? I was lead by the wish to mobilize these immune organs in aid of the sensitive ones, which learn never or very slowly to get rid of the bacilli.

The more often this process of healing of a real tuberculosis focus is repeated, the better the organism learns to defend itself; the resistant organs must be taught to kill the bacilli in order to help the defenceless ones.

But we must look to come to the therapeutic problem.

Are there any proofs for this theory in the practice?

This question must be answered in a scientific way. One of the most exactly working disciplines is ophthalmology. The tuberculosis foci may be here controlled very easily and the effect of specific treatment is directly to be read of the eyes.

The disappearance of tuberculosis foci is easily to be stated, because of their small size.

With few ophthalmologists I pleaded for the specific treatment for nearly 20 years, but now I can say, that specific treatment in tuberculosis of the eyes is acknowledged in the whole world as a souverain remedy. In earlier times the percentage of healing was 10 to 15 per cent, now it is 80 to 85 per cent.

The second object to test my opinion was the tuberculosis of the urogenitary system.

You all know the helplessness of our therapy in cases if both kidneys and both testes and both vesiculae seminalis and the bladder were affected. Such cases are fit to decide whether a treatment is good or not.

Prof. Blum, the famous urologist in Vienna sent these cases to me, to be treated. Since 1905, a year before Wright, I proposed an ideal specific treatment, led by the opinion, that we must use the same, identical virus which causes the illness as antigen, therefore we have to make au-

to-vaccines in all chronical diseases, especially in tuberculosis.

In these cases I cultivated the tuberculosis bacillus directly with my method out of the urine, made an auto-vaccine and injected the dead bacilli in large quantity into the muscles. One of these cases got a hydro-nephrosis, which made the extirpation unavoidable. The histological examination showed the surprising result, that only scars of tuberculosis foci were to be found and a tuberculous stricture of the ureter. All the other cases showed also a surprising melioration which surpassed all expectations. In all these cases the cold abscess of the size of a cherry persisted during two to three months.

These experiments in men must be continued in order to decide the question so important for the therapy of incurable disease.

The same virus which is the cause of the disease is the cause of the healing.

In other words the co-operation of all organs, the resistant as well as the affected, is the solution of one of the riddles of immunity and immun-therapy.

AN ADDRESS BY THE RETIRING PRESIDENT OF THE DETROIT NEUROLOGICAL SOCIETY

FRANK R. STARKEY, M. D.
DETROIT, MICHIGAN

I wish to thank the members of the council and especially the Secretary for their co-operation and assistance during the year, and all of the members for their interest and attendance at the meetings.

While this has not been a year of great achievement and we have not had as many speakers from out of the city as we may have desired, still we have accomplished some things. We have adopted a revised constitution which has been printed and gives more tangible evidence of our existence as a society, and in this we have laid down definite rules for time of meetings which dispense with the rather indefinite procedure of the past. We have held five meetings which is more than the usual number for the year, and have added to our membership substantially and our treasury is in a healthy condition, so that we are really in a more vigorous and prosperous condition than ever before.

Much of our programs the past year has been devoted to the relation of the psychiatrist to crime and it is upon this subject I especially wish to speak, though I may

seem to digress at times, for the public has always looked to the physician for guidance in social and moral problems as well as matters of physical health. The vocation of medicine is a dignified one and carries great responsibility and upon it, to a large extent, depends the progress of civilization, but its prestige in this country is being undermined by cults and fads. The law is gradually letting go of traditions and more frequently seeking medical council but the physician and especially the psychiatrist must not indulge in fantasy and allow himself to be swept off his feet by fads. The psychiatrist should not forget that much of his information is subjective and that the subject has much at stake. It is claimed that the distinction between physical health and disease is a social one; between sanity and insanity a legal one, but in reality they are both social problems. Law represents a desire to promote orderly functioning of a group; crime is a violation of law, so that if there was no law there could be no crime. Affective influences rather than intellectual processes often decide matters of great social and economic importance. Repressed complexes are responsible for judgments formed on slight evidence which harmonize with such constellations. Our attitude is changed in the course of time as much by change in affectivity as by evidence. Strong differences of opinion are attributed to lack of reasoning by opponents. It is a long step from the burning of witches; cutting off of hands for larceny and confining the insane in dungeons, or even padded cells to the present paternalistic attitude toward criminals, and while it cannot be disputed that resistance begets resistance and that the removal of restraint in the handling of the disturbed insane has accomplished much good, still, I feel that the pendulum has now swung too far the other way in dealing with criminals and that we have become derelict in this problem by over-anxiety for the welfare of the delinquent to the neglect of the public at large. There can scarcely be any doubt in the mind of any rational being that crime has increased in this country in recent years. Street hold-ups are so frequent as to no longer attract attention, while pay-roll robberies are so prevalent that many firms pay by check rather than risk the danger of handling the necessary cash to pay off help. Banks are establishing armed forts to protect themselves. Statistics are unreliable because they are always colored

by the affects of the statistician and public sentiment at the time. They are especially difficult to evaluate in this connection because of the extreme breadth of the subject and the many angles from which it must be viewed. There are, however, no reliable statistics to prove that the attitude of those recommending the abolition of punishment is correct. The evidence against punishment is entirely negative. Unfortunately the leaders in this work who are disseminating their propaganda among Women's Clubs, amateur psychologists and other bodies noted for their ability cannot be considered entirely disinterested from a selfish standpoint, for many of them occupy part or full-time salaried positions or receive other increment from this work, while still others who do not receive any financial gain are governed in their zeal by their anxiety for publicity to gratify their own egotism. The newspapers, which are the only reading indulged in by a large per cent of the public, deliberately advertise crime and make heroes of criminals while the doings of worth while people go unnoticed. It is impossible to place full responsibility for present conditions upon any one factor. It seems that by our extreme leniency and failure to enforce the penalties of the law toward the criminal, who is a finished product in most cases, we are beginning at the wrong end. Rather should we start with the home, which is the ultimate unit of our political existence, and there we should foster obedience and the development of character, for obedience is one of the fundamental laws of nature and its transgression is punished all along the line and invariably it results in destruction and oblivion. Honesty, industry and economy are no longer taught in the home so that the exercise of self-restraint is neglected. Inhibition is a necessary product, both physical and mental, of evolution and is built up step by step as each addition of the nervous system is acquired from amoeba to man. The tendency in the home today is not to instill respect for parents, law, religion, rights of others or education, but the watchword of the day seems to be to get by with the least effort, self-sacrifice or inconvenience and this is permitted and even encouraged throughout our educational system. It is no longer the rule of our schools and colleges to promote education primarily for its own sake. The credits system now in vogue permits the students to select subjects which are the easiest for him to get by with, rather

than because of their value from either the educational or economic standpoint, and this at the very time and place when stamina should be instilled into our youth, results in shirking of obligations and responsibilities. Extravagance, promoted by the partial payment plan; the advent of the automobile; stress of competition both social and economic; restlessness; enactment of unreasonable laws which cannot be enforced or respected and attempted adherence to obsolete laws (blue laws. The law's delay; unscrupulous lawyers; multiplicity of laws; segregation of racial groups; attitude of the public, and parents in particular, in attempting to hide mental deficiency, preventing its early recognition and treatment, differing from that toward ordinary disease, are factors in the production of crime. The stigma now attached to mental disease must be dispelled by teaching the public that there is no essential difference between mental sickness and physical ill-health so far as any humiliating circumstances are concerned. The thought of the insane asylum should be eliminated from the public mind. The wisdom of our form of government with its frequent change of personnel and policy is, at least open to serious consideration and the police situation which comes closest to our present subject, is sadly in need of revision, for its personnel is often selected without due consideration of the character of the individual and the habits of its members from the lowest to the highest are at times not such as to encourage self respect for law and order. The handling of criminals by the police, who are often arrogant and brutal, suggesting the very acts they are supposed to suppress. Many institutions and customs exist among them which cannot fail to promote crime rather than prevent it. The so-called kangaroo court composed of the most aggressive prisoners which robs, beats and otherwise abuses and intimidates new prisoners without serious effort to suppress it by the officials in charge of the jails, cannot but breed contempt for and resentment of law and authority. The dissemination of obscene pictures and literature, the peddling of narcotics and alcoholics, the lack of segregation of old offenders from new prisoners, are but a few of the abuses that should be corrected. Among other important causes are German propaganda against punishment of crime which has been so subtly, diligently and systematically carried on from the time they re-

alized their cause was lost and whose effects are evident, though unrecognized by many. Prohibition, which has I believe done more to undermine respect for law and order and common decency, even among our youth, than all other factors combined, should not be overlooked in this connection. The hypocrisy toward prohibition, in the face of the overwhelming evidence of the great harm it is doing, is amazing. It is being fostered by the same type of minds who advocated witch-burning and who formulated the blue laws. When internal revenue was first levied by the United States Government upon those manufacturing alcoholic beverages there was a small group of mountaineers who persisted in making whisky illicitly. During all of the 60 or more years that passed until the introduction of prohibition, the United States Government, with all of its mighty forces, diligently and persistently endeavored to stamp out this illegal practice but was unable to do so even among this small group. Today there are literally millions of individuals, many of them occupying the highest positions officially and socially, in the land openly and flagrantly breaking this law and the government is spending vast sums of money in an endeavor to enforce it. This is increasing our taxes, disorganizing our government and breeding disrespect for law and order, for many officials who are pretending to make strenuous endeavors to enforce it are not obeying it themselves but converting their offices into lucrative positions by illegal methods, while the youth of the country, seeing the ease with which illicit dealers in alcoholics make money, are throwing laws and restraint to the winds. Yet those who pretend that prohibition is a success, instead of acknowledging this condition and reversing their position are blindly shutting their eyes to the truth or perverting it, which is resulting in a general disregard for government, with a subsequent increase in crime. Added to this is the physical harm that is accomplished through the use and abuse of the products of ignorant, inexperienced poorly equipped and unscrupulous manufacturers. The enormous gravity of this subject should not be ignored and the truth should be told by all medical bodies as such, as it is understood and told by its members as individuals. Therefore, I advocate that this society go on record as being opposed to the eighteenth amendment of the constitution of the United States.

The question of what we are to do with the criminal remains and should be, I believe, considered from the standpoint of prophylaxis as indicated above, treatment and prognosis. As to the treatment of the finished product or criminal, I believe that the history of the world proves that swift, impartial, dignified enforcement of the law is the greatest deterrant of crime that we have and it is a notorious fact that there is more major crime in the United States than in any other country in the world. Where extreme leniency has been in practice there is at least no tangible evidence of any decrease in such crime. We have approximately ten times as many homicides in the United States as in England, in proportion to the population, also ten times as many murders. The homicide rate is twice as great in states where the death penalty has been abolished as where retained. The claim that abolishing the death penalty will do away with prolonged and expensive trials is without foundation which is well illustrated in the Thaw case and many other cases. This type of parent with money will go to any length to save their offspring from their obligation to society, and, so long as the sob-sister fraternity exists we will have interference with the regular processes of our courts of law. The anxiety of social workers and other members of the sob-sister squad for the welfare of the criminal to the neglect of the body politic and the victims of their crime, is unwarranted and their efforts and the pressure they bring to bear upon public officials is frequently absolutely illegal. The parole system, while inherently sound, should be handled with great deliberation and caution, for even if we take the advocates of extreme leniency at their word, the criminal is fundamentally wrong and is usually a repeater. If we are to consider all criminals as sick why perpetuate the psychiatric clinics and the service of psychiatrists with their big fees when it is a foregone conclusion that the law breaker is sick and in need of hospitalization and gentle nursing rather than so-called punitive methods. The crimes that we have to deal with are committed by a small group and even if we were to admit, for the sake of argument, that they are sick and irresponsible should we place them in a privileged class and permit them to indulge their abnormal tendencies rather

than to exterminate them in the case of capital offenders or permanently deprive them of freedom in the case of repeaters? The number of executions, even if all convicted were put to death, would be so small and their lives of so little value as to be not worth so much attention. Then why not direct our efforts in some other line. The reason, jobs. I believe that we cannot justify the conclusion that all criminals are mentally sick. To do so we must assume knowledge of mental processes that we do not possess. Obedience, self-control, industry, economy and a true sense of values should be instilled in our youth. Our educational system should be so revised that scholastics rather than athletics would be the aim of the student. A selective system should not permit the students too much leisure but he should be taught the value of time. Hypocrisy should be supplanted by honesty in thinking and acting. Unreasonable and obsolete laws should be repealed. Those remaining should be vigorously enforced. People who cannot be taught to respect the law should be taught to fear it by its swift and impartial action. We should exert greater care in selecting our law-makers. Politicians should be supplanted by statesmen.

As to prognosis. The prognosis cannot be said to be encouraging, for, although education is our main hope, no method yet evolved has been successful in changing human nature even to a small degree and sex, avarice, revenge, vanity, superstition and ignorance, which are responsible for most crime, will continue in spite of law, religion or education. Expert testimony has received so much publicity that for sheer self protection we must modify our position in regard to it. We are looked upon with suspicion by the courts and the public. The alienist and in fact the expert witness in general is often branded a liar from the start. One of the reasons for this is the practice of certain experts of expressing opinions without a complete history and examination of the case or acquiring all of the essential facts. I would suggest that medical experts be selected by the medical societies and not by individuals, lawyers or the courts, although the present method of employing lunacy commissions in use in Wayne County has much to commend it and should result in improvement in handling criminal cases.

EXPERIMENTAL TREATMENT OF DERMATOMYCOSES WITH IODINE

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Materials—Free Iodine (Colloidal Suspensoid state).

Preparation of materials—A colloidal suspensoid state of iodine is prepared by the acidification at 0°C. of sodium iodohypoiodite containing gum arabic in solution.

Note—The tincture of iodine is frequently used in the treatment of dermatomycoses. The tincture, however, causes irritation to the skin, often resulting in the production of blisters locally; and, sometimes, in a systematic reaction classified as "iodism."

The colloidal suspensoid used in these experiments is pure free iodine in an extremely finely divided form capable of remaining in suspension in water for a practical length of time. No solvents of iodine stronger than water are present. When applied to the skin it is not held on the surface of the skin by powerful solvents, as in the case of the tincture and is, therefore free to penetrate the skin to the maximum depth of which iodine is capable, and to volatilize from the surface so that no blistering of the skin results, even when repeatedly applied to the same area. It should, therefore, be very useful in the treatment of certain types of dermatomycoses; and, results obtained in experimental cases appear to substantiate this theory.

CASE 1

Patient: Female.

Age: 20.

Occupation: Stenographer.

Diagnosis: Ringworm infection of fingers extending between the fingers and over the knuckles.

Previous Diagnosis: Ringworm.

Previous Treatments: X-ray, Maximum number of treatments; tincture of iodine.

Condition of hands when first observed: Raw areas between the fingers as the result of X-ray and tincture of iodine blistering. New areas of infection on the border of these blisters and isolated new areas. The skin over the knuckles thickened, rough, cracked and "weeping."

Treatment: The entire hands were bathed in an aqueous solution of iodine suspensoid until a lemon-yellow color was obtained. New areas of infection and the border of the old areas were then given the following treatment:—Iodine suspensoid was applied by means of a cotton swab, gently swabbing until all of the iodine was removed from the water, repeating this operation several times until a very dark brown coloration was established. Glycerinated alcohol consisting of 4 per cent glycerin in 50 per cent ethyl alcohol slightly colored with iodine was then prepared

and the patient instructed to bathe her hands freely in this several times during the day to keep the skin moist. This patient was seen daily and the iodine treatment repeated as often as new areas appeared.

Results of treatment: Immediate improvement was observed and in the course of three weeks to one month no new areas appeared, the old areas disappeared and the hands healed completely in an astonishing manner.

CASE 2

Patient: Female.

Age: 40.

Occupation: Housewife.

Previous Diagnosis: Ringworm.

Areas Involved: Both hands, especially on the knuckles.

Microscopic Findings: Negative.

Cultural Findings: Staphylococcus.

Previous Treatment: X-ray, and tincture of iodine employed for more than two years. The condition of the patient's hands was very similar to that in case 1, except that new areas resembled small vesicles.

Treatment: The same treatment which was employed in case 1 was employed in this case. Recovery was not so marked and the skin appeared so dry at times that the patient was instructed to apply mineral oil to the hands. In the course of about two months the patient's hands appeared to be entirely healed. Six months or so later, however, new areas appeared. When these were treated with the Iodine Suspensoid as soon as they appeared, a prompt recovery was observed. No new areas have appeared during the past year.

CASE 3

Patient: Male.

Age: 22.

Occupation: Student.

Previous Diagnosis: Ringworm.

Areas Involved: Scalp and forearms.

Microscopic Findings: *Trichophyton tonsurans*.

Previous Treatment: X-ray, Tincture of Iodine, Zinc Oxide.

Condition of patient when first observed: Several areas of infection occurred on the scalp ranging in size from the size of a dime to the size of a half dollar piece. These areas were highly inflamed and had a distinct border. The infection on the forearms had a similar appearance, though possessing more yellowish scabs.

Treatment: In this case no attempt was made to treat the areas of infection of the scalp, but the infection on the forearms was treated with the Iodine Suspensoid, after having removed all of the grease by means of bathing with a 50 per cent alcohol and then drying the areas. The suspensoid was applied several times as in Case 1 until the infected area became quite dark in color. Only a single treatment was given in this case. When the patient was next seen, about two months later, the infection had entirely disappeared from not only the forearms but the scalp as well. The patient reported rapid recovery following the iodine treatment.

CASE 4

Patient: Male.

Age: 19.

Occupation: Student.

Previous Diagnosis: Ringworm.

Areas Involved: The legs, particularly the thighs, also the scrotum. The condition was

most severe in the inguinal region. The entire inner surface of the thighs in particular was covered with numerous areas of infection which in many instances overlapped so that the whole surface had the appearance of being covered with a dry cracking scab.

Microscopic Findings: *Trichophyton tonsurans*.

Previous Treatment: Zinc Oxide.

Treatment: Two areas, one on each thigh, about three inches in diameter were treated with the iodine suspensoid by applying fresh material as rapidly as the skin removed the iodine from the water until the area was very dark. The patient was instructed to report at the end of a week, but failed to do so. When next seen, about three months later, he reported that there had been a rapid improvement and that the entire infection had fully disappeared. He stated that he had not returned because of the improvement noted, and the fact that he experienced a severe burning sensation of the skin at the point of application for an hour or so due presumably to the fact that the treated areas were covered with clothing. He had, however, observed no blistering and no symptoms of iodism.

CASE 5

Patient: Male.

Age: 20.

Occupation: Student.

Previous Diagnosis: Barber's itch.

Areas Involved: The chin and cheek.

Previous Treatment: Zinc Oxide.

Treatment: The infected areas were washed with alcohol to remove the grease. The scabs were softened by treating with an aqueous solution of iodine prepared from the iodine suspensoid and removed. The infected areas were then given four consecutive treatments with the iodine suspensoid. A marked improvement was observed the following day and the areas were treated with a small amount of mineral oil. The infected areas entirely cleared up within a few days.

CASE 6

Patient: Male.

Age: 21.

Occupation: Student.

Previous Diagnosis: Barber's itch.

Areas Involved: The chin, particularly the skin of the lower lip.

Previous Treatment: Zinc Oxide.

Condition of patient when first observed: There were two areas of infection, one just below the lip and one on the point of the chin. These areas were very similar to those in Case 5.

Treatment: Same as in Case 5, with identical results.

CASE 7

Patient: Male.

Age: 19.

Occupation: Student.

Areas Infected: The thighs and scrotum.

Microscopic Findings: *Trichophyton tonsurans*.

Diagnosis: Ringworm.

Condition of patient when first observed: Several areas of infection were present on the thighs and scrotum and were of the typical ringworm type. The surfaces were reddened and scaly with a sharp line of demarkation between the infected areas and the skin.

Previous Treatment: None. This case was of only about one week's standing.

Treatment: An area about two inches in diameter on the thigh was painted with four or five

immediate successive applications of the iodine suspensoid. This treatment was repeated about every three days for four or five treatments.

Results of treatment: The entire infection cleared up in the course of about one month and has not since recurred.

It is of interest to note that in Cases 3, 4 and 7 *Trichophyton* infections of the skin on parts of the body separate from the parts treated were entirely eliminated following the treatment of local areas with the iodine suspensoid. No explanation for this phenomenon will at present be offered.

SUBACUTE BACTERIAL ENDOCARDITIS WITH A REVIEW OF TWENTY-EIGHT CASES

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The recent appearance of Bierring's¹ clinical review of a series of 30 cases of subacute bacterial endocarditis, read before the section on the practice of medicine at the seventy-seventh annual session of the American Medical Association, at Dallas, Texas, in April 1926, and the subsequent discussion, has served to again emphasize the lack of uniformity among authors in various parts of the country in the application of diagnostic criteria to this disease. At the same time the evidence seems to call for a recognition, either of two forms of the same disease or a differentiation between two separate clinical entities which have much in common, yet with a far different prognosis. In either circumstance the first of these, from standpoint of importance, would be those cases which fulfill the established classical requirements of diagnosis as "subacute bacterial endocarditis" with its implication of rare recovery. The other, whether classed as a mild type of the former disease or as a similar but less fatal malady, deserves a separate and distinctive appellation of its own. The increase in number of reported cases of recovery from a mild type of infection, hitherto designated as "subacute bacterial endocarditis," yet not strictly conforming to the classical description, seems to the authors to justify this contention.

Since the attention of the medical profession was directed to this condition a generation ago, there has been an ever widening discussion of the disease and recognition of it under various names, of

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which two perhaps seem destined to remain in the literature because of their really descriptive applicability, "Subacute Bacterial Endocarditis" and "Endocarditis Lenta." Blumer's² remarkable analytical monograph, with its bibliograph of 195 references, in 1923, served to crystallize the knowledge on the subject up to the time of its publication and to provide a new base of departure for all subsequent contributions.

Three years previous, in 1920, Horder³ made a general review of the subject and gave a most clear cut and workable clinical description of the disease, setting up his fundamental criteria for diagnosis, which, if adhered to, will do much to establish a uniformity of conception about this disease and facilitate the differential diagnosis in the all too common obscure cases which serve as sources of confusion. In many of these latter a hasty and not thoroughly justified diagnosis of subacute bacterial endocarditis, with its dark portent, may work a definite and unnecessary detriment to the patient.

On the other hand, full and appreciative consideration must be given to the experience of Libman⁴, his wonderfully interesting and significant specimens, and his cases of "endocarditis lentissima." These pathological specimens, with their evidence of healed endocardial lesions, undoubtedly represent previous mild cases and probably form the appropriate background for understanding the series of cases with a high percentage of recovery such as reported by Capps⁵ and by Graham, Oille, and Detweiler⁶ among others. With the incontrovertible evidence of healing as seen in Libman's collections of material and the many clinical cures in the reports, it seems very probable that many actual instances of this pathology may occur and not measure up with all of Horder's criteria. It is in this latter group that the reported recoveries predominate and the prognosis in this group of suggestive cases is on the whole very different.

Our own small series of cases, we feel, conforms to the first, or "classical" group, and corresponds so closely to those reported by Bierring¹ as to be in general almost identical. Having approached the analytical review of them from a somewhat different angle than that followed by Bierring we present the results.

The chief aim is but to add, to the available reports of this now well recognized clinical entity, these additional cases in the hope that some future student of this

interesting and baffling malady may deduce from a multiplicity of reviews from widely separated sources, some fact of therapeutic significance and thus modify the present uniformly gloomy prognosis.

These 28 cases represent all recognized instances of this disease seen in this hospital prior to 1926, and were selected by reviewing the case records of all patients indexed as endocarditis. Horder's four criteria for diagnosis: (1) evidences of embolic phenomena; (2) fever; (3) bacteremia, and (4) demonstrable cardiac valvular defect, were used here also as diagnostic yardstick. Sixteen of these 28 cases conformed to all four of the requirements. Certain others were added, 12 in number, because the other clinical evidence was incontrovertible and conformance was seen with respect to three of the four essentials. None was allowed recognition with less than three of these criteria. Of these four criteria two have been found by many observers to be variable in their time of appearance, and of sufficient inconstancy as to be occasionally missed when the patient is not under close and continuous observation. These are the evidence of embolic phenomena, which may be late in appearance, or may occur erratically at intervals throughout the course of the disease, and the bacteremia which may be evidenced in some cases only upon persistently repeated blood cultures. Cases were admitted to this group then which lacked only one of these phenomena, the other being present. No cases were accepted, however, in which fever was lacking or in which there was reasonable doubt as to the existence of a valvular defect. A factor of uniformity in observation was maintained in that all these patients were reviewed during their hospital stay by one of us. (F. J. S.).

I.—Incidence.

These 28 cases occurred in the first 70,000 hospital admissions,* a hospital incidence of .04 per cent.

Age, Race and Sex—Table I.

There were 19 males, 9 females; one was colored, 27 were white; the ages ranged from 19 to 61. The group is too small to permit any conclusions save that there is a significant preponderance of the patients (78-per cent) between the ages of 20 and 45, the most active and economically useful period of life.

* This figure refers to total admissions including both outpatients and inpatients of all departments.

TABLE I—AGE, RACE, SEX

AGE	
Below 20 (19)	1
20-25	6)
25-30	2)
30-35	5) 22 (78-%)
35-40	7)
40-45	2)
45-50	1
50-55	2
Above 55 (58) (61)	2
RACE	
White	27
Colored	1
SEX	
Males	19
Females	9

II.—Predisposing Causes—Table II.

There was a history of acute rheumatic fever in 14, or 50 per cent; tonsillitis in 14, or 50 per cent; scarlet fever in 5; chorea in 2; oral sepsis in 10, or 35-per cent; syphilis in 1; typhoid fever in 3; diphtheria in 2; influenza in 4; pneumonia in 1; etc. Of these later scattered types of previous infection the incidence is probably not higher than the coincidence expectation. A previously recognized cardiac lesion was present in 9, or 32-per cent.

TABLE II—PREVIOUS INFECTIONS

Acute Rheumatic Fever	14
Tonsillitis	14
Oral Sepsis	10
Chorea	2
Scarlet Fever	5
Diphtheria	2
Typhoid	3
Influenza	4
Pneumonia	1
Pleurisy	1
Poliomyelitis	1
Septicemia (Post abortive)	1
Peritonitis	1
Known previous cardiac lesion	9 (2 congenital heart defect)

III—Initial Symptoms—Table III.

The prevalence of asthenia, dizziness, and embolic phenomena in the form of blindness, hemianopia, or abdominal pain suggestive of splenic infarct is interesting as a symptom at onset. The associated phenomena of fever, such as, malaise, chills, sweats, dizziness, etc., are, of course, wholly to be expected and not in any way pathognomonic.

TABLE III—INITIAL SYMPTOMS

Asthenia	10
Headache	4
Fever	5
Sweats	2
Chills	2
Abdominal Pain	4
Malaise	4
Neuritis	2
Dizziness	1
Coryza	1
Blindness	1
Hemianopia	1
Anorexia	1
Insomnia	1
Palpitation	1
Arthritis	2
Cough	5
Epigastric Distress	3

IV.—Infecting Organisms.

Of the 21 cases in which a positive blood culture was obtained once or more, and

usually repeatedly, the organism was identified as streptococcus viridans in all but two cases. In these the reports specified only nonhemolytic streptococcus without further differentiation. Of the 7 instances in which a positive blood culture was not obtained there were 2 in which there were three negative cultures, 2 with two negative cultures, 2 with only one negative culture, and 1 with five negative cultures.

The portal of entry must, of course, always be clouded by doubt in this as in other series. Circumstantial evidence indicates, in many of the patients, that the tonsils, paranasal sinuses and abscessed teeth seem the most likely avenues to the blood stream. It is rather striking that the general experience of others in finding that a large percentage of periapical abscesses yield pure cultures of streptococcus viridans, was substantiated in certain of our cases by the recovery of an organism identical with that obtained from the circulating blood. While it is unsafe to attempt any conclusions from such indirect evidence, the facts are certainly suggestive.

V.—Symptomatology—Table IV.

The symptom complexes of the several cases presented considerable variation depending upon the length of the period of observation, the stage of the disease, the chronicity or acuity of the process, the presence of intercurrent infections, the presence of unusual phenomena, the abundance of embolic phenomena, and the general type of progress whether largely influenced by embolism, general anaemia and cachexia, cardiac failure, etc. Reference to the table shows that certain symptoms tended to prevail, e.g. in 27 cases there was asthenia, in 18 loss of weight, in 12 anorexia, in 8 arthritis, in 14 dyspnoea. In 4 of the cases, there was abdominal pain, referable in three instances to splenic infarcts. The painful Osler nodules were present in 7 cases, or 25 per cent. Neurological manifestations were evident in 17 of these patients at some time, which dizziness, headaches, and hemiplegia were the most frequent.

TABLE IV—SYMPTOMATOLOGY

Arthritis	8
Osler Nodes	7
Dyspnoea	14
Palpitation	6
Asthenia	27
Anorexia	12
Loss of weight	18
Chills	12
Fever	28 (all)
Sweats	14
Cough	5
Abdominal pain	4
Neurological:	17

Dizziness	6
Headache	3
Blurred Vision	2
Heimanopia	1
Photophobia	1
Neuritis	2
Bell's Palsy	2
Aphonia	1
Syncope	1
Coma	2
Hemiplegia	4
Blindness, recurrent	1
Drowsiness	1
Insomnia	1

VI.—Physical Findings—Table V.

The positive findings upon physical examinations also varied for the same reasons given above; and, again, certain phenomena appeared too frequently to permit explanation on the basis of coincidence. For example, some degree of recognizable anaemia appeared in 18, obvious malnutrition in 14, a demonstrable cardiac lesion in all, demonstrable clubbing of the fingers in 13, petechial hemorrhages in 22, and the spleen was palpable in 11 of the 28.

TABLE V—PHYSICAL FINDINGS

Emaciation	14
Gross Anaemia	18
Palpable Spleen	11
Clubbed Fingers	13
Petechial Hemorrhage	22
Cardiac Lesions:	28 (all)
Aortic Insufficiency	9
Aortic Stenosis	1
Mitral Insufficiency	21
Mitral Stenosis	15
Congenital Defects	4
Pulmonary Stenosis	2 (?)
Patent Ductus	1 (?)

VII. Cardiac Involvement—Table V & VI.

There was sufficient clinical evidence to warrant the diagnosis of aortic insufficiency in 9 cases; aortic stenosis in 1; mitral insufficiency in 21; mitral stenosis in 15; and congenital defects of the heart were suspected in 4. Disturbances in the cardiac function were arbitrarily classified as apparently complete compensation, 18 cases; subacute decompensation 6 cases; and acute decompensation 4 cases. Undoubtedly, many of the first two groups would have been reclassified into the third group had they been under observation toward the end of the course of the disease, as were the three cases so tabulated. Auricular fibrillation was observed in 2 cases only.

TABLE VI—CARDIAC FUNCTION

Complete Compensation	18
Subacute Decompensation	6
Acute Decompensation	4 (3 others later)
Auricular Fibrillation	2

VIII.—Embolie Phenomena—Table VII.

Of the 24 cases showing unmistakable evidence of embolism the incidence of distribution is shown as follows: petechial hemorrhages, in the skin, in 16; in the conjunctivae in 8; in the retinae in 9; in

the kidney (as indicated by the appearance of red blood cells in the urine) in 9. There were 8 cases of cerebral involvement; 2 presumable pulmonary infarcts; 4 proven splenic infarcts; and 3 renal infarcts (seen at autopsy). There were 2 instances of peripheral embolism, 1 in the femoral, 1 in the brachial artery.

TABLE VII—EMBOLIC PHENOMENA

Petechial Hemorrhages	22
Skin	16
Conjunctive	8
Retinae	9
Osler's Nodes	7
Kidney	9
Cerebral	8
Pulmonary	2
Splenic (Proven by Necropsy)	4
Renal (Found at Necropsy)	3
Peripheral	2
Femoral	1
Brachial	1

IX.—Laboratory Findings—Table VIII.

Blood: In 6 cases the red count and hemoglobin content approximated normal, being over four million red cells and 75 per cent hemoglobin. In 13 cases there was mild anaemia—between 3 and 4 million red blood cells. In 7 cases there was a moderately severe secondary anaemia. In one case the anaemia was very severe, a red count of 1,044,000 and a hemoglobin of 19 per cent being recorded.

The white corpuscle count was at no time above 10,000 in 15 of the cases; in 8 the maximum range did not exceed 15,000; and in but 3 instances was it above 15,000. In the highest (24,000) it was associated with embolism and thrombosis of the left brachial artery, and in the next highest (18,000), the rise accompanied pulmonary infarction.

Renal Involvement: In determining renal involvement several factors were considered; namely, the urinary findings, the phenolsulphonphthalein excretion, and nitrogen retention. Reference has already been made to the appearance of red blood cells in the urine in 9 cases. Albuminuria has been a variable feature, particularly so because it may depend upon so many influences outside the actual circumstance of this disease entity. In some instances it was of occasional appearance only, in some a constant finding. It did appear, however, in 21 of the series, in 10 of whom there was a definite appearance, either continuously or repeatedly, in considerable amounts.

In 12 patients upon whom the test was recorded, the phenolsulphonphthalein excretion was within normal limits in 8, and was definitely decreased in 4. Retention of nitrogenous products was shown in only

7 cases, in 6 others the nonprotein nitrogen was normal, in 9 the urea nitrogen was normal. The apparent discrepancy between these figures and those of Table VIII is due to the fact that not all of these determinations were made on the same patients.

The blood Wassermann reaction was frankly positive in no case.

TABLE VIII—LABORATORY DATA

Blood Counts:	Blood	Culture
RBC and Hemoglobin Range	Pos.	Neg.
Approximately normal (RBC 4 million, Hb. 75%)	6, 4	2
Slight anaemia (RBC 3-4 million, Hb. 60-75)	13, 10	3
Moderately Severe Anaemia (2-3 million, Hb. 40-60)	7, 5	2
Extreme Anaemia (Less than 2 million, Hb. 40%)	1, 1	
Leucocyte Range:		
Never above 10,000		15
10,000 to 15,000		8
Above 15,000		3
Urinalysis:		
Albumen not found	7	
Albumen present	21	
2 to 4 plus	10	
1 plus	9	
Trace	2	
Casts present	16 (Hyaline and Granular)	
R.B.C. present	9	
Blood Chemistry: (Figures in mmg. per 100 c.c.)		
Nonprotein nitrogen (Number of patients)	11	
Below 35	6	
Above 35	5 (71, 85, 50, 78, 47)	
Urea Nitrogen (Number of patients)	14	
Below 15	9	
Above 15	5 (50, 29, 22.4, 53, 27)	
Phenolsulphonphthalein Output:		
Number of patients	12	
Below 50% return in 2 hours	4	
Above 50% return in 2 hours	8	
Wassermann Reaction:		
Negative	26	
Frankly Positive	0	
Equivocal	1**	
Not reported	1	

** 2 plus with one antigen, negative with another.

X.—Treatment—Table IX.

Treatment proved as unsatisfactory here as elsewhere. In general all patients were put at rest and upon highly nutritional diet, with suitable tonic, stimulation of appetite and assimilation instituted. In 4 cases the removal of obviously vitiating foci of infection was carried out. In one case, which filled all the requirements of diagnosis except a proven bacteremia—there being three negative blood cultures—treatment by removal of diseased tonsils and teeth resulted in an apparent cure. This fact alone serves to throw considerable doubt on the validity of the diagnosis, especially as the symptoms dated back but a few weeks. However, there were evidences of cerebral and pulmonary embolism and a presystolic cardiac rumble developed while under observation.

TABLE IX—THERAPY

Intravenous Acriflavine	5
Intravenous Gentian Violet	4
Sodium Cacodylate	7
Removal of Foci	4 (one apparent cure)

XI.—Post Mortem Findings—Table X.

Owing to the unfavorable prognosis and uniformly unsatisfactory results from the known methods of treatment but few of these cases remained in the hospital until time of death. Therefore, but four were made the subject of necropsy study. In one additional case, which terminated outside of the hospital, the spleen alone was examined by the local physician, and his findings reported. Of these the lesions were as follows: evidences of old infection of the mitral valve 4; aortic valve 2; pulmonic valve 1. Fresh vegetations were found on the mitral valve 4, the aortic valve 2, in the conus 1. Mural vegetations were present in three cases. There were 4 instances of splenic infarcts, 3 of renal infarcts, and 1 of pulmonary infarct.

TABLE X—NECROPSY FINDINGS

Heart:	
Old valvular lesions	All
Mitral	4
Aortic	2
Pulmonic	1
Fresh Vegetations:	
Mitral	4
Mural	3
Aortic	2
Conus	1
Infarction:	
Splenic	4
Renal	3
Pulmonary	1

XII.—Duration.

The average duration before recognition was a little less than 5 months, 12 of the cases giving a history of from 3 to 6 months' illness prior to admission. Of the 13 cases of which we have accurate information as to the date of death, the average duration of the disease was slightly less than 10 months.

COMMENT

This series of cases again serves to focus attention upon those facts so frequently emphasized by observers of this disease: the prevalence of previous infections preparing the necessary background of diseased endocardium, the so-called rheumatic group—acute rheumatism, chorea, etc.,—upon which the specific organism streptococcus viridans becomes established through some later portal of entry into the blood stream—a focus of infection. With such small hope of results in the way of treatment with any of the available agents now at hand, the most rational procedure in attempting to reduce the future mortality from this disease seems to lie in the field of preventive medicine. As the science of medicine as yet has advanced no means for controlling the chief predisposing factor of rheumatic heart disease, the atten-

tion should be devoted to removing the immediate etiological factor of streptococcus viridans infection by a thorough eradication of all foci of infection, particularly tonsils and all devitalized teeth, in persons with known rheumatic heart disease.

We propose the diagnosis of *subacute bacterial endocarditis* be limited to those showing three or more of Horder's criteria, in which the prognosis is known to be uniformly fatal and that the others be diagnosed *suspected subacute bacterial endocarditis*. Surely there must be some significance to the fact that patients having all of Horder's four diagnostic points practically all die; while innumerable instances showing less than three have been reported to recover. If these patients all had one and the same disease, at least those showing the four criteria have progressed to a definite and readily recognized stage where the general problem and outlook is quite different and it seems that a clear conception of this as a fact might avoid much of the current confusion.

CONCLUSION

(1) A greater uniformity of conception is desired in order to further our knowledge of this disease. To this end a more general and a more strict application of Horder's criteria is urged in those cases to be labelled "subacute bacterial endocarditis." For the nonconforming group of cases we suggest the term "suspected subacute bacterial endocarditis." Such a diagnosis is particularly suitable because it implies the idea that the graver condition may be in the offing and still affords some fair degree of hope as to the prognosis.

(2) The only present hope of reducing the mortality of subacute bacterial endocarditis seems to lie in a reduction of the incidence of the disease by a removal of all discoverable foci of infection in all cases of rheumatic heart disease.

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VITAMINS AND HEALTH—A CHRONOLOGICAL STUDY OF THE VITAMINS FROM 1915

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(Using the American Medical Association Journal as a reference.)

Using the American Medical Association Journal as a reference and dating back to 1915, there appears from time to time articles dealing with vitamins. The first of these is to be found in the November issue of the eighth Journal. It speaks of some substance other than fats, proteins and carbohydrates which is vital to animal life. As a first illustration it was shown that the wheat grain plus wheat straw, while adequate to nourish the cow, was not sufficient for reproduction. The absence of this substance from other foods was responsible for poor growth and disease, such as, beriberi, scurvy and rickets. The name vitamins was given to this substance, and its absence in foods is called avitaminosis.

Aside from fats, proteins and carbohydrates, vitamins are necessary for normal metabolism, i. e., toxicity of metabolism is held in check by the presence of vitamins. William¹ and Seidell¹ came to certain conclusions regarding the chemical composition of these substances, but they are not definite enough to take a place in the literature of today. Their conclusions, however, point to the fact that the vitamins are being given considerable study by able men. Watson and Weymes also contributed articles in 1915. In October, 1916, is an article entitled "Dietary Toxicity and Food Deficiency." In summary the article discussed the interest centered in the toxic performance of some micro-organism in the body and that the power of defense of the host is overlooked. It directed attention to the fact that certain foods play a very important part in such defense. Dr. Lusk² writes in 1917, that in an investigation of the chemical factors entering into the cultivation and growth of the meningococcus, which was conducted at Cambridge, certain vitamins were found necessary and that nutrition included something more than the production of energy from fats, proteins and carbohydrates. He called them unidentified components of diet.

An article appears in the November number of 1917 under the title, "Vitamins and Tumor Growth" by Leo Loeb³ of St. Louis. In concluding his study he asks

the question as to whether tumor cells have the power to synthesize vitamins. He argues that on a diet deficient in vitamins, if the animal increases in weight only as the tumor increases, it is obvious that the tumor increases independent of the vitamins, but if, on the contrary, the tumor increases and the animal remains the same, then the tumor must be extracting the necessary vitamins for its growth from the host's tissues. This he claims has been found to be a fact, and from this I would conclude that an invading micro-organism may have the same effect upon the host. Then when we find the particular vitamin that a given micro-organism absorbs or synthesizes we may either limit the amount of such vitamins, or feed it in such quantities as will suit the needs of the organism plus the body or host.

In one of the September numbers of the same year (1917) a warning is sounded, that we cannot lay all nutritive disorders to food deficiencies. Mr. Funk⁶, in the December number, calls attention to a number of cases of necrosis of the cornea in Danish children who had been fed on nearly fat-free separator milk, and who got well on breast feeding, whole milk and cod liver oil. Dr. Hess⁷ claims in this connection, that pasteurized milk may bring about scurvy unless an anti-scorbutic is used in the dietary. Madison⁷ pointed out in 1918, that nursing women should have foods high in nutritive value, or vitamins, and that boiling milk destroys a portion of the vitamins. He suggested further, that a food rich in vitamins, such as barley, will increase weight over rye or wheat, also that lack of vitamins influences appetite and the reverse. He found that polished rice is poorest in vitamins, and barley is highest among the grains. Dried cooked vegetables have little or no vitamins, and in fresh fruit they are abundant, and acid-fruits are thermo-stable. Their presence in wine is questionable, and bacteria themselves are dependent for their growth on vitamins. Beriberi seemed to develop when they began to polish rice, and became a disease of prominence in proportion. Rice contains vitamins, but they are in the layer or skin of the grain, and this is removed by polishing. Also that the milling of wheat had a lot to do with the disease of the army in Europe especially in the Dardanelles. Canned meat and vegetables were also condemned for the same reason, i. e. lack of vitamins.

In the "Study of Polynuritis," which is the analogue of beriberi, McCollum⁸ sepa-

rated from rice millings what he called water soluble vitamins B, and found that this same vitamin could be separated from various plants by the use of alcohol, and fed properly, it would cure beriberi. This is the first reference I found of a specific vitamin. In the same year (1918), Chick⁹ and Hume⁹, at the Lyster Institute, found that foods differ in their vitamin stability when subjected to heat. Wheat vitamins were notably stable. They also found that one food may contain a number of different vitamins, any one of which could be destroyed or made dormant by heat. From this I conclude that various vitamins had been separated and tabulated by 1918.

In 1919, Dr. Jansen¹⁰ experimented with young rats to determine the vitamin content of cocoanut oil. The outcome showed no growth of the rats. He, therefore, concluded that there was little or no vitamin in cocoanut oil. He also found that vitamin is not identical with secretin. Osborn¹¹ and Mendal¹¹ have suggested that green foods supply a very important part of our food diet on account of their high vitamin content, as compared with cereals, meats, potatoes, fats, and sugar. It used to be thought that we eat green foods only for the roughage they supplied, but the studies of Osborn and Mendal raise them in the scale of value by showing us their vitamin content.

Hulbert³⁴, in 1920, found that foods containing no vitamins would stop cell division in the sexual organs of chickens, and that by adding vitamin-containing food, the cell division went on as before.

Danials¹², Byfield¹³, and Laughlin¹⁴, found that by feeding an anti-nuretic vitamin, such as is obtained from the wheat embryo, to babies with a food containing a sufficient number of calories that growth was stimulated and resistance to disease increased. Stimbock and Gross found that plants of yellow pigment contained an abundance of fat soluble vitamins, and that heating for three hours under fifteen pounds pressure does not destroy any of the vitamins of the yellow maize.

In 1920, an article appeared summing up all I have covered to this point, but adding nothing to the material of other investigators up to 1919, excepting the prophecy that in the study of foods and their relation to metabolism in the human body, the vitamins would play an increasingly important part.

Writing in January, 1920, Danials¹² and Byfield¹³ were the first to call attention to the fact that there is a distinct relation

between the vitamin content and the amount of food a baby would take. They cited that a breast fed infant requires a less amount of food than a bottle-fed baby, and that the addition of a high vitamin containing food would create a greater desire for food. They mention especially the anti-nuretic vitamin B.

In the January number Hess³⁶ and Unger³⁶ called attention to the role of the fat-soluble vitamin A and its relation to rickets. They stated that the drying of foods containing vitamin A fixes the anti-scorbutic principle and brings it into a more permanent state. In other words, it makes the anti-scorbutic principle more thermo or heat stable. They give as an example that milk that has been quickly dried will stand a heat of 120 degrees centigrade for an hour, whereas milk (fluid) loses all its anti-scorbutic when heated in like manner.

At that time they did not know that vitamin D was the anti-rachetic vitamin residing in both milk and cod liver oil, and that it is thermo stable. Or, that vitamin A is the anti-scorbutic principle and that vitamin D is the anti-rachetic principle, both of which are very abundant in cod liver oil.

It was found further, that in dehydrating vegetables, young fresh vegetables should be used if we are to retain their greatest vitamin value. Also in reference to rickets, and the beading of the ribs, they found that the same beading occurs in scurvy, but that it disappears upon feeding orange juice and other anti-scorbutic foods.

Dr. Boutwell¹⁹ also found that the vitamins in yellow maize, chard carrots, sweet potatoes and squash were thermo-stable after three hours of heating under fifteen pounds pressure at a 150 degrees centigrade. Dubin²⁰ and Louis²¹ reported in the May 29th Journal for 1920, a formula for the preparation of a stable vitamin product designated as vitamin B. It was prepared as follows: calcium oxide 10 per cent, phosphorus 15 per cent, nitrogen 3.5 per cent, fat 2.5 per cent, iron 3 per cent, silicates 5.6 per cent, moisture 10 per cent. They gave this preparation to polynuretic pigeons, normal and scorbutic guinea pigs, and finally to children who showed evidences of malnutrition, marasmus and rickets. A marked acceleration of growth was obtained, particularly in the children. This proved that the preparation contained anti-nuretic, anti-scorbutic and anti-arthritis vitamins. This product in conjunction with a properly balanced diet

of fats, carbohydrates and proteins would seem to be a valuable addition to our feeding problem. In June 12th number, 1920, McCarrison²² records where a monkey was fed for fifty-one days on a food deficient in vitamin B. At the necropsy a well developed carcinoma was found. He attributed the growth to the deficiency in the food. He again reports in the July 24th number of the same year the fact that gastro-intestinal diseases are very apt to develop when diets are deficient in one or more of the vitamins, but rich in carbohydrates.

Osborn and Mendal in the August 14th number, 1920, report their findings. Vitamin B in the fresh juices of the orange, lemon and grapefruit is about equal to a same quantity of cow's milk. Prunes contain a little more and lemons and grapefruit a little less.

Von Masenburg²⁴, reporting in the October 9th number, 1920, says that spasmodic spasmophilia is not influenced or caused by a deficiency of any of the food excessory factors.

Samuel R. Damon²⁵, in the July 8th number for 1922, reports that vitamin B was necessary, not alone for its growth stimulating properties, but also because it stimulated the appetite. The effect of all the vitamins on nutrition was out of all proportion to the amount used, and further, that rats fed a sufficient basal ration but lacking in vitamin B had a gradually descending weight line, which rapidly ascended when the wheat germ was added to the ration. Emmett Holt, writing in this same number, says that pasteurizing food or milk, in particular, is considerably more destructive to its vitamin content than boiling at a high temperature for a short time, and further, that the indiscriminate use of vitamins is going to lead to disappointment, since each case presents a new picture and should be studied as such. In closing his article he calls attention to the fact that cabbage is a rich source of all our vitamins, and that a diet containing a reasonable amount of whole-milk, cereals, green vegetables, potatoes and fruit will eliminate the fear that there is a deficiency in vitamins. This statement is true for the adult, but it is not true for infant feeding since they need a more careful supervision of their diet.

Writing in the July 15th number, 1922, Shumoske Marin²⁶, discusses an eye disease in rats due to a deficiency in vitamin A in their food. He says that several names have been applied to it. McCollum

and Simonds termed it xerophthalmia and is analogous to keratomalacia in man, the pathological changes being the same as those which characterize necrosis and the destruction of the cornea. An unsigned article in September 23rd number, 1922, calls vitamin A a specific vitamin in the treatment of rickets. In the light of later researches this statement was found to be untrue, but that a fourth vitamin, or vitamin D is the one potent in rickets, and that vitamin A holds first place in the treatment of xerophthalmia. Leading up to this later knowledge McCollum, writing in 1923, says that the power of certain fats to initiate healing in rickets depended on the presence in them of a substance which is distinct from fat soluble vitamin A. His experiment demonstrated the existence of a fourth vitamin whose specific property was to regulate the metabolism of the bones. Further, that cocoanut oil which had received no chemical treatment possessed calcium depositing properties and had little, if any, anti-xerophthalmic effect. Again, in speaking of xerophthalmia, an article which appeared in the October issue, 1922, in the study of vitamin A, brings forth the fact that the first lesions of the disease does not appear in the cornea, but is manifest by a local foci or degeneration of the lids, and then a hardening or drying of the epithelium of the cornea.

An article in the November 4th number, 1922, comments on the rich source of vitamin A from green plants and marine life, especially the cod. Citing that green plants have the power to synthesize it, and that because the cod lives on sea algae or the diatoms, it also has the power to synthesize it. Another point which is interesting to note is that the cod is one of the fishes that never come to the surface, so that it is never exposed to the sunlight or the ultra-violet rays.

In the January 14th number, 1923, of Vol. 78, Wright²⁷ asserts that vitamin B acts by facilitating the carrying out of the functions of the intestinal canal, and that results produced by its absence are loss of appetite and diminished food intake, loss of weight and death. All this being due to the intestinal stasis and absorption of toxic products which result therefrom.

Sidney Walker²⁸, in some experiments on rats with fat soluble vitamin A, says that he treated xerophthalmia with mercuric chloride, (1-3000) and 2 per cent solution of protargol without results. They made smear cultures of the infection as

soon as the eye symptoms appeared and found a large coccus,; with this they tried to inoculate the eyes of well rats, but without results. The eye symptoms were cleared up with the addition of vitamin A to their food.

Vitamin, as a factor in immunization, was discussed in the February number for 1923 by Biondo. He cites that the taking away from pigeons of vitamin B causes loss of their immunity to anthrax, and its return in their food restores their immunity.

Da Metto²⁹, in his studies of the vitamin containing fruits, found that the alligator pear and the Brazil nut contained a water soluble vitamin, and that both offered advantages as a diet in diabetes.

Sherman³⁰ and Smith³⁰ in the May 13th number, 1922, commenting upon the proprietary concentrates of vitamins, stated that most of them are of no use, and that fruits and vegetables, when used in sufficient quantities, would leave no call for the concentrates so-called.

Dr. H. C. Sherman³⁰, in the May 20th number, 1922, commenting on the lack of anti-scorbutic, or vitamin C in grains, says that an abundance of the vitamin C is to be found in oranges, lemons, tomatoes and raw cabbage, and that a cow fed on fresh grass produces milk rich in vitamin C.

In the June number (24th), 1922, E. V. McCollum³⁴ and Nina³¹ Symonds M. A., carried out a series of experiments on rats to determine the potency of a number of vitamin concentrates. They conducted their experiments the same as any feeding experiment. They found six different concentrates advertised to bring about wonderful results to the purchaser, to be absolutely without effect, and they had to use the known food vitamin carrier to bring the rats back to normal. An experiment carried on by Cramer³¹ where rats were fed on foods devoid of all the vitamins showed that they were less resistant to disease, that their bodies lost their muscle tone. In our work in the biological laboratory in Detroit we found the same thing to be true. In the February number, 1923, it is reported that the chemist, Katsuya Kakahashi³² isolated the vitamin A from cod liver oil. Ten grams of the substance was separated from one kilogram of cod liver oil, 0.0001 grams of which was sufficient to save an animal dying from a deficient diet. The substance kept well in a fatty solution, and it contained 80 per cent carbon, 10 per cent hydrogen, and resembled cholesterol.

In May 19th number, 1923, it was reported that a dog that had been fed on a high vitamin A diet did not lose his vitamin A even if he was starved, but did lose it if he was fed on a vitamin A free diet.

In 1924 Ishido³³ found that the ultra-violet ray prevented atrophy which would otherwise occur in the bone marrow of rats in avitaminosis. At the present time we know that the ray is nearly a specific in rickets, but it does not influence xerophthalmia, and that cod liver oil does.

In June 16th number of the 1925 Journal, the question was asked as to what vitamins can do, and in summing up it was stated that they seemed to act as a regulator of mineral metabolism. Three women, Miss Danials, Miss Armstrong and Miss Hutton, in the biological laboratory of Iowa City, carried out an experiment in feeding rats with a diet lacking in vitamins. The second generation of these rats all showed rickets. Of the fifty rats fed, twenty-five were controls. The first twenty-five developed snuffles, decreased in weight and appetite. Autopsies on them showed that all had pus in the mastoids, and paranasal sinusitis. Seven had serious eye lesions, in six the middle ear was filled with pus, and the lungs were infected in ten. Of the controls, five showed a little nasal reddening, none showed eye, ear, nose or lung infection. All were free from sinus trouble. A number of the sick rats, when fed cod liver oil, recovered rapidly.

Hurbert³⁴ believes that each vitamin enhances the action of others. Gurstinberger³⁵ found that vitamin B was curative in herpes, stomatitis and acute gingivitis.

There is an interesting article in the March 22nd number, 1924, in which is recorded an experiment dealing with milk. Milk was heated in a copper receptacle for forty minutes at 60 degrees centigrade and fed to rats, using as equal number of controls that were fed milk which had been heated in like manner except in a glass container. The first rats all developed scurvy within a month, but the others remained free from it. It was found that some of the dairies in Germany used hydrogen peroxide to preserve milk, and it was noted that there was a decided increase in scurvy among children who had used this milk. This seemed to prove that the vitamins were oxidized.

In conclusion, I would say that our knowledge as to just what vitamins are, and what they do in the human body is not entirely clear. That vitamin concen-

trates, if there are any, are not very essential to our feeding problems, there is no doubt of the existence in foods of a very necessary food factor called vitamin—a life sustaining property. All foods contain their correct proportion of vitamins under normal conditions. Rickets, scurvy, polyneuritis or beriberi, xerophthalmia and malnutrition are due to the absence of one or more of the vitamins in food, and their cure depends directly on feeding the proper vitamin containing food.

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MICHIGAN'S DEPARTMENT OF HEALTH

GUY L. KIEFER, M. D., *Commissioner* • Edited by MARJORIE DELAVAN

WHO WILL DETERMINE MICHIGAN'S HEALTH IN THE FUTURE?

Has it ever occurred to the readers of this Journal that a single public health official or even a health organization cannot successfully compete with the problem of good health and that they must have co-operation? In order to do the best public health work there should be co-operation between the people at large, the medical profession, the dental profession, the nursing profession, the teachers, and all official and non-official health agencies. It occurs to me that this combination might form what could be designated as a public health team and that its effectiveness in bringing about a greater degree of good health will be in direct proportion to the amount of team work it shows.

As your State Health Commissioner, I do not mind telling you that I would be willing to become a candidate for the position of Manager of this team and if you care to elect me to this position, I would organize the various members about as follows:

Inasmuch as the co-operation of the physicians is of most importance, I would expect them to be regular members of the team with the other groups forming what might be called co-operative members.

The job of the health official today is one of education and the best way for him to spread that education to the public at large is through all the members of this health combination referred to above and particularly through the physicians. All preventive work such as vaccination for the prevention of smallpox, immunization against diphtheria, scarlet fever and typhoid fever, should be done by private physicians and the only reason health departments have done this work in the past and are still doing it is because it has not been taken over by the medical profession which means that the right kind of co-operation has not existed. So what the boards of health are doing now in this respect and what they have done may and should be considered as demonstration work for the purpose of teaching the public that it should call upon their own doctors to protect them against those com-

municable diseases for which we have a method of immunization.

Another one of the things that we are trying to teach the people is that their babies should be kept well from the day that they are born and to accomplish this baby clinics have been established and are being conducted by boards of health. I am sure that every right-minded public health official would be glad if this work were taken over by the practicing physicians as it is, in fact, being taken over in the large cities.

Continuing this line of thought, we are preaching (and in this respect the State Medical Society and the various County Societies have tried to help us) that adults and older children as well as babies should be kept track of, that they should have periodical medical examinations at least once a year to determine the condition of their health with the hope that pathological conditions may be discovered early and thus be entirely remedied or at least kept from progressing. The dental profession have worked hard on this co-operative plan and have obtained the best results. There is hardly anyone of any intelligence who does not go to his dentist at intervals to have his teeth looked over and defects corrected.

Teachers are becoming much interested in the public health program and it is a pleasure to hear superintendents of schools and others in the teaching profession make public utterances to the effect that medical inspection of school children is doing much to improve the health and consequently the scholarship of the pupils.

Non-official health agencies are busy in their various lines and to get the best results for Michigan's health in the future, all of the members of the proposed public health team should work together and through a central agency.

Suggestions as to how more active teamwork can be brought about will always be welcomed by this department and will be acted upon whenever they are found feasible.

Guy L. Kiefer,
Commissioner of health.

SCARLET FEVER STREPTOCOCCUS TOXIN

Judging from the requests coming in to the Bureau of Laboratories, a number of physicians did not receive my letter of February 7 in regard to the distribution of scarlet fever streptococcus toxin. To prevent further misunderstanding, I attach the letter, and urge that its directions be read carefully:

"The fact that persons can be immunized against scarlet fever by repeated inoculations of scarlet fever streptococcus toxin has been definitely established. Scarlet fever streptococcus toxin will be distributed by the Michigan Department of Health for the active immunization of children against scarlet fever after February 1, under restrictions. There are so many unknown factors in this immunity reaction that additional information is necessary before general distribution can be recommended.

"I have authorized the Biological Distribution Division to distribute these products upon requests from health officers and physicians as follows: The request of the physician or health officer should be made in writing, stating the number of children he wishes to protect against scarlet fever. Upon the receipt of the request, scarlet fever streptococcus toxin for performing the Dick test on that number of children will be forwarded with instructions for performing the test. When the department receives notification of the number of Dick positive children that are to be immunized, the first dose of toxin will be forwarded for treating the positives. Ten days later the second dose will be shipped, ten days later the third dose, and ten days later Dick test material for retesting. The physician and health officer will then make a report to the department which must include a description of the reactions as well as the number of failures to immunize as indicated by the Dick test.

"I feel that there has been too great an attempt to force scarlet fever prophylaxis and therapeutics along the line of procedure that has been found satisfactory in diphtheria, and that not enough study has been given the method of application of the scarlet fever toxin to secure active immunization.

"Very truly yours,

"Guy L. Kiefer, M. D., Commissioner,
Collaborating Epidemiologist,
U. S. Public Health Service."

MOUTH HYGIENE ACTIVITIES

Interest in the work of the new Bureau of Mouth Hygiene and Preventive Dentistry has been very marked. Three educational leaflets, "Dental Hints for the Prospective Mother," "Baby Teeth," and "The Child's Permanent Teeth" were printed last fall, and before the first of the year requests had been received for 100,000. They have been reprinted in several dental journals and have brought many favorable comments from outside of Michigan.

A suggested plan for dental health activities among school children was sent out with the January number of the News Letter for Public Health Nurses issued by the Bureau of Child Hygiene and Public Health Nursing. As a result, such an avalanche of requests for material came in that the supply was immediately exhausted and unfilled requests for 25,000 leaflets had to be filed awaiting a new printing.

The director of the bureau, William R. Davis, D. D. S., has been out in the state almost continually since the last of January, filling requests for talks before clubs, Parent-Teacher meetings, and conferences and clinics with public health nurses and dentists.

ENGINEERING VISITS DURING DECEMBER,
JANUARY AND FEBRUARY

Inspections of railroad water supplies, a service carried on in co-operation with the United States Public Health Service, were made in the following cities:

Adrian	Hartford
Albion	Jackson (5 visits)
Allegan	Kalamazoo
Ann Arbor	Lansing (3 visits)
Bad Axe (2 visits)	Ludington
Baldwin	Mackinaw City
Battle Creek (3 visits)	Manistee (2 visits)
Bay City	Monroe
Benton Harbor	Monteith Junction
Birmingham	Muskegon (4 visits)
Boyer City	Owosso (2 visits)
Cadillac (3 visits)	Oxford
Cass City (2 visits)	Palms
Caro (2 visits)	Pentwater
Detroit (3 visits)	Petoskey
Durand	Pontiac (2 visits)
East Jordan	Port Austin
East Tawas (2 visits)	Rochester
Flint	St. Joseph (2 visits)
Frankfort	South Haven
Freeport (4 visits)	Traverse City
Grand Ledge	Wilmont
Grand Rapids (5 visits)	Vassar
Grayling	

Sewerage and sewage disposal confer-

ences and inspections were reported for 21 cities:

Adrian (3 visits)	Lapeer
Bay City	Manistique
Detroit (2 visits)	Marlette
East Grand Rapids (3 visits)	Melvindale
Escanaba	Memphis (2 visits)
Flint	Muskegon
Grand Rapids (for Petoskey)	Muskegon Heights (2 visits)
Hastings	Romeo
Holland	Traverse City
Lansing	West Branch
	Zeeland

Steam pollution investigations were carried on in six cities:

Battle Creek	Grand Haven
Blissfield	Grand Rapids (2 visits)
Croswell	Holland

Swimming pool investigations were made in two cities:

Lansing (2 visits)	Ypsilanti (2 visits)
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Inspection of one county tuberculosis sanatorium:

Adrian

Inspection of four plants for garbage collection and disposal:

French Landing (2 visits)	Lansing
Grand Rapids	Muskegon

Water supply conferences and inspections included 29 cities:

Adrian	Grand Rapids
Ann Arbor (for Dexter)	(Michigan Soldiers' Home)
Battle Creek	Grand Rapids (for Rockford)
Bay City	Hudson
Big Rapids	Lake (School)
Benton Harbor	Lansing
(3 visits)	Manistique
Berrien Springs (Emmanuel Missionary College)	Memphis
Carson City (for Maple Rapids)	Menominee
Detroit	Midland (2 visits)
Detroit (for Utica)	Monroe
Escanaba	Niles
Grand Haven	Reading
Grand Rapids (4 visits)	Rockford (2 visits)
	South Haven
	St. Joseph
	Williamston

MEDICO-LEGAL SERVICE

The Michigan Department of Health has for many years maintained a laboratory and employed a chemist whose sole duty is to make medico-legal analyses in suspected criminal cases. This is in accordance with Public Acts No. 109, requiring the department to make such analyses when requested to do so by the proper authorities.

After every election a number of new coroners, prosecuting attorneys, and sheriffs take office, and most of them do not know that they can secure the services of a state official to make such analyses and

to assist them in their investigations. This department is very desirous of making this service of maximum value and it is for that purpose and also to give some points on the handling of such cases that this article is written.

When a postmortem is to be made in a case of death from a suspicious cause, if it is desired that the state toxicologist make an analysis, the following instructions should be followed: The state toxicologist, Charles L. Bliss, should be notified at once, by telephone or telegraph, care of the Laboratory, Michigan Department of Health. Calls at night should be sent to his home. It is very desirable that he be present at the postmortem for several reasons. The postmortem is made by a physician appointed by the coroner; the toxicologist can assist the physician, thus dispensing with the necessity of employing a second physician. By being present he can determine what organs or other materials he needs for analysis without having to depend upon the selection made by some one who probably has never made an analysis. He receives the organs direct from the body and from that time he alone is responsible for them. Furthermore, he can almost always secure information which is of very great value in making the analysis; this shortens the time required for the work, saves material which might otherwise be wasted in testing for poisons that are not present, and cuts down the fee that is charged.

The body may be removed to an undertaker's unless it is desired to hold the postmortem elsewhere. Nothing further should be done to the body until the toxicologist arrives. The clothing should not be removed nor the body washed; valuable clues or evidence might be destroyed. The body should not be embalmed. Although the use of arsenic and certain other poisons in embalming fluids is prohibited in this state, the fluids contain other chemicals which may interfere with or even absolutely prevent the detection of certain poisons.

If the toxicologist is not present, the postmortem is usually made in a manner which is very unsatisfactory from a medico-legal standpoint. Organs are often sent to the laboratory which are not suitable for a proper analysis; often they are sent in containers which have not been properly cleaned or sealed; sometimes preservatives have been added; and usually little or no information is given, leaving the toxicologist without a clue to work on. This in-

creases the work on the analysis and also usually increases the fee charged.

No charge is made for the services of the toxicologist at a postmortem except ordinary traveling expenses. A charge is made against the county for any analysis made. This charge, however, is a very reasonable one, and depends upon the amount of work required. All fees for such work go into a state fund.

It might be added that in every instance where the toxicologist was present at the postmortem, if the case proved to be a criminal one and was brought to trial, a conviction for murder in the first degree has resulted, and in every other case with one or two exceptions the cause of death has been definitely determined. In those cases where he has not been present, but organs have been sent for analysis, there have been comparatively few convictions and some of these cases could not even be brought to trial.

If the postmortem is made without the toxicologist being present the following points should be observed. The organs which are usually best for analysis for poisons are the stomach and a part of the intestine with their contents, the entire liver and both kidneys, also the urine if there is any in the bladder. The stomach and intestine should be ligated before being cut out and should not be opened. Each of these organs should be put into a new, clean, glass-topped fruit jar and properly labeled and sealed. No preservative should be added. The jars should be delivered by an officer if possible; if sent by express they should be addressed to the toxicologist.

In addition to analyses for poisons the toxicologist is prepared to make analyses and examinations in many other kinds of criminal cases, such as examination of suspected blood stains, semen stains, etc.

SPRING CLEAN-UP

Spring clean-up campaigns have become so increasingly popular of late that special educational material has been prepared this year to meet the demand. With the passing of the tacked-down carpet and plush hangings has come a welcome emancipation from the rigors of old-time house-cleaning, and the energy thus liberated seems to be transferring itself to municipal improvement.

All of which is a matter for congratulation. A clean town is not automatically a healthy town, but it stands a better chance of being one. And it certainly is a more cheerful and prosperous town.

As a part of the educational material, a new fly poster has been prepared, notable for its lack of the traditional manure piles and garbage pails. There is a leaflet to accompany the poster, and a "Clean Up Your Town" leaflet written especially for popular distribution in clean-up campaigns.

This material, like all poster and pamphlet material from the department, is sent free of charge, upon request.

PREVALENCE OF DISEASE

	February Report Cases Reported			Av. 5 years
	January 1927	February 1927	February 1926	
Pneumonia	661	679	754	900
Tuberculosis	647	342	434	387
Typhoid Fever	26	33	21	37
Diphtheria	499	485	382	508
Whooping Cough	560	534	1,314	596
Scarlet Fever	1,438	1,423	1,500	1,362
Measles	523	902	7,798	2,511
Smallpox	171	186	32	186
Meningitis	10	13	8	16
Poliomyelitis	8	2	3	4
Syphilis	1,083	1,148	1,154	915
Gonorrhea	705	717	1,200	808
Chancroid	7	12	3	10

CONDENSED MONTHLY REPORT

Lansing Laboratory, Michigan Department of Health
February, 1927

	+	-	+ -	Total
Throat Swabs for Diphtheria				972
Diagnosis	31	360		
Release	153	130		
Carrier	2	274		
Virulence Tests	14	8		
Throat Swabs for Hemolytic Streptococci				625
Diagnosis	133	216		
Carrier	49	227		
Throat Swabs for Vincent's	14	379		393
Syphilis				5865
Wassermann	1			
Kahn	969	4802	93	
Darkfield				
Examination for Gonococci	145	1149		1294
B. Tuberculosis				414
Sputum	63	318		
Animal Inoculations	3	30		
Typhoid				104
Feces	15	46		
Blood Cultures	1	11		
Widal	9	15		
Urine		7		
Dysentery				38
Intestinal Parasites				14
Transudates and Exudates				325
Blood Examinations (not clas- sified)				687
Urine Examinations (not clas- sified)				372
Water and Sewage Exam- inations				531
Milk Examinations				87
Toxicological Examinations				13
Autogenous Vaccines				4
Supplementary Examinations				153
Unclassified Examinations				523
Total for the Month				12414
Cumulative Total (fiscal year)				103371
Decrease over this month last year				2410
Outfits Mailed Out				96612
Media Manufactured, c.c.				62420
Typhoid Vaccine Distributed, c.c.				2054
Diphtheria Antitoxin Distrib- uted, units				30251000
Toxin Antitoxin Distributed, c.c.				21760
Silver Nitrate Ampules Dis- tributed				3410
Examinations Made by Houghton Laboratory				1693
Examinations Made by Grand Rapids Laboratory				6028

EDITORIAL DEPARTMENT

EDITOR: Frederick C. Warnshuis, M. D., F. A. C. S.

ADDRESS ALL COMMUNICATIONS TO THE EDITOR—1508 G. R. NAT'L BANK BLDG., GRAND RAPIDS, MICH.

MINUTES OF THE EXECUTIVE COMMITTEE MEETING

The executive committee of the Council of the Michigan State Medical Society convened at 6 p. m., in the Pantlind hotel, Grand Rapids, March 16, 1927.

Present: Chairman Stone, J. D. Bruce, Geo. L. LeFevre, President Jackson and Secretary Warnshuis.

1. The Secretary made comment upon the present condition of legislative matters and the President presented the resignation of A. W. Hume as a member of the Legislative Committee. The Chairman of the Council, the President and the Secretary were instructed to attend hearing on the Tuberculosis Sanitarium at Lansing on March 23rd. The Secretary was directed to present to the Internal Revenue Office at Washington and also the district office in Detroit the ruling of the Attorney General of Michigan regarding the use of narcotics by osteopaths and call the attention of the United States Revenue Collector to the ruling of his department in regard to the issuing of such licenses.

2. The Secretary reported completion of the organization of the Endowment Educational Foundation and he was instructed to use his judgment in making a modest beginning towards securing outside subscriptions to this Foundation.

3. The Secretary reported on the plans and arrangements that were being perfected for the Annual Meeting at Mackinac Island. These were approved and publicity regarding same was directed to be made in the columns of the Journal.

4. The Secretary reported upon District Conference Post Graduate work we are planning and the plans outlined were approved.

5. On motion of Dr. LeFevre, supported by Dr. Bruce the Secretary was instructed to arrange a conference of County Secretaries to be held in Jackson during the latter part of April, at such date as the Secretary may select after making contact with the profession in Jackson.

6. The Secretary reported on activities that were being pursued in regard to the investigation of illegal practitioners. Upon motion of Dr. LeFevre, supported by Bruce the Secretary was authorized to employ and utilize the services of Mr. John C. Carey, attorney.

7. The Secretary was instructed to collaborate with the Chairman of Committees on County Societies and Dr. Peterson for the arrangement of Cancer Clinics and public education in regard to cancer, during the month of May.

8. The Secretary was instructed to call to the attention of the Superintendent of the Battle Creek Sanitarium a communication received from the Judicial Council of the American Medical Association and secure if possible his reply to this communication.

9. A communication from the physicians of

Luce County requesting authority to organize a Luce County Medical Society was read and the Secretary instructed to take up the matter with the Councilor of that District and after favorable recommendations were received to then submit a referendum vote to the entire Council relative to the granting of a charter to the Luce County Medical Society.

10. A communication from Dr. Elwood, Secretary of the Menominee County Medical Society requesting authority to affiliate with adjoining Wisconsin County Society was read. The Secretary was instructed to take this matter up with the Councilor of that District and also the Secretary of the Wisconsin State Medical Society and then to submit this information to the entire Council for a referendum vote.

11. On motion of Doctors LeFevre and Bruce, the Secretary was instructed to publish a roster of the members of the State Society by Counties and to place this roster in the hands of each member for his reception room table.

12. President Jackson presented a communication from the State Commissioner of Health relative to co-operative survey and study as regards maternity mortality in the State. On motion of Dr. Bruce supported by Dr. LeFevre, the Secretary was instructed to take this matter up with the Committee on Public Health and through that Committee to tender to the State Department of Health the Society's co-operative support.

13. President Jackson presented a communication from Mrs. Caroline Bartlett Crane, Chairman of the Society's Committee on the organization of a Woman's Auxiliary. The communication was approved and the Secretary instructed to send this letter to the Presidents and Secretaries of each County Society.

The meeting adjourned at 10:30 p. m.

F. C. Warnshuis, Secretary.

A SUMMARY OF THE MINUTES OF MEETING OF THE HEALTH LEGISLATIVE BUREAU

The second meeting of the Health Legislative Bureau was held Feb. 4, at 7 p. m. in Hotel Olds, Lansing. In the absence of the chairman, Dr. Haze, the meeting was presided over by Dr. J. B. Jackson.

Representatives of the State Medical Society, State Department of Health, University of Michigan, University of Michigan Hospital Nurses Association, Michigan Tuberculosis Association were present and took part in the discussion—Senators Person and Greene and Representative Upjohn were also present by invitation.

Senator Person, who introduced a bill into the Senate to repeal the law of 1925, which provided for the establishment of a state sanatorium and setting aside of \$500,000 for this purpose, was asked to express his opinion as to why it was necessary to repeal the present law. The Senator replied that he believes the law was a piece of joke legislation and that \$500,000 which is in the general fund of the state cannot be legally drawn out by anyone. He contended that the committee as provided by the law which has chosen Ann Arbor as the site of the new sanatorium, is not legal. The senator stated that he would be glad to see an institution such as contemplated at Ann Arbor after Howell was first taken care of.

Senator Greene, who was a member of the committee which chose Ann Arbor as the site of the new sanatorium, stated that Ann Arbor was chosen because with this location not only the needed additional beds would be supplied and with a consulting staff of experts available, but it would also afford an opportunity for proper teaching of diagnosis and treatment of tuberculosis to the medical students. This he considered a very important point. As to the legality of the action of the committee Senator Greene stated that this had been gone over and passed on by the legal department of the state.

Representative James T. Upjohn, who, like Senator Greene, is a physician, spoke of the great need for better teaching of tuberculosis prevention in medical colleges and expressed the hope that Michigan would not be deprived of the privilege of taking a leading part in the better training of its medical students in tuberculosis. He entertains no doubts as to the legality of the committee which chose Ann Arbor as the site of the new institution. He also spoke of the drafting of a bill to supplement the law of 1925. This would soon be introduced into the legislature.

The representatives of the Bureau then discussed the question and in brief expressed the following opinions:

1. There is urgent need for more beds for the tuberculous in Michigan. We have in all sanatoria in the state approximately 2,200 beds and we have an annual death rate of about 2,800. We are still short approximately 600 beds according to the minimal estimate for proper care of the tuberculous of the state.

2. A sanatorium should not only provide treatment for tuberculosis but for the patient. Many complications and coex-

istent diseases are found among the tuberculous and to properly care for this a consulting staff of specialists is important. Ann Arbor furnishes at minimal cost the services of a highly trained corps of specialists to meet such needs.

3. If a half million dollars were spent at Howell to improve conditions it would not relieve the urgency of the situation by adding more beds. That institution is at present the proper size for most effective work.

4. The sanatorium as contemplated for Ann Arbor would furnish an institution which would make possible better training of the medical students in tuberculosis. All medical schools are weak in the teaching of this disease. With a sanatorium close at hand with, perhaps, 250 patients most excellent training in the diagnosis and treatment of tuberculosis would be made possible and the young doctors from Michigan would be better prepared to give effective help in combatting this disease.

5. The opinion was generally expressed that Howell is needed for its beds and that the Ann Arbor sanatorium is also much needed.

Communication from Kalamazoo Academy of Medicine, St. Clair County Medical Society and Genesee County Medical Society were received expressing their hearty approval of the site (Ann Arbor) of the new sanatorium and affirming their conviction that more beds for the tuberculous should be provided.

Dr. J. B. Jackson, who presided, spoke briefly, expressing the opinion that it was the sense of the meeting that repeal of the law establishing the sanatorium at Ann Arbor was not necessary and would not bring best results in the cause of tuberculosis in our state. He repeated that apparently no one present had any desire to scrap Howell.

The meeting was then adjourned.

E. R. Vander Slice, Secretary.

WAYNE COUNTY MEDICAL NEW HEADQUARTERS

The Wayne County Medical Society celebrated the formal opening of their new home in the Maccabee Temple on Friday evening Feb. 18. A reception was held in the club rooms from 7 to 8. At 8 a sumptuous banquet was served in the large auditorium on the first floor. The large banquet hall was filled with members of the society and their guests.

Dr. Martin, who is the editor of the

Wayne County bulletin, was especially graceful and witty in his introduction of the speakers of the evening. Dr. J. H. Dempster, the president of the Wayne County Society, in a brief address welcomed members and guests into the new home of the society.

Dr. James E. Davis in a scholarly manner reviewed the important features of the Hippocratic oath and called attention to the applicability of this old statement of ethics to present day practice.

Mayor John W. Smith spoke of the fact that the medical profession often fails to show a spirit of co-operation. If the doctors of the State could agree they might control legislation pertaining to medical practice and hygiene and public health. In proof of this he called attention to the effect of the united efforts of the profession in defeating the chiropractic bill during the 1925 session of the legislature. He also called attention to the responsibility of the profession in eliminating from its ranks licensed members who are unfit to treat the sick.

Dr. Hugh Cabot, dean of the University Medical School, spoke of the responsibility of the profession in training the doctors of the future. The accumulating mass of scientific knowledge has made this task increasingly difficult. He emphasized also the obligation of the profession in teaching the public the facts of medical science. Health education is a demand on the part of the public and it is the plain duty of the profession to meet this demand.

Dr. Guy L. Kiefer, newly appointed State Commissioner of Health, emphasized the value of periodic health examinations. He called attention to the fact that many physicians have failed to submit themselves to these examinations much to their own disadvantage.

Judge Alfred J. Murphy brought the greetings of the legal profession in a very happy manner. He ably criticized the present methods of presenting partisan expert testimony and made a plea for a method of securing such testimony free from prejudice and partisan bias. Medicine and law should strive together for better and nobler ideals of practice.

Rev. John T. Nichols, S. J., president of the University of Detroit, spoke of the fact that the Jesuits have always emphasized education as a preparation for any field of activity. Modern pre-medical education emphasize too much the stuffing with facts and too little the cultural values. Pre-medical training should teach students

to think. Poorly trained men should not be given the stamp of approval in the hopes that they may change for the better. Hospital staffs need to appreciate more fully their responsibilities in training internes. Too often this responsibility is slighted.

The Wayne County Society is to be congratulated on its new surroundings; the club rooms are most artistic in their appointments. A dining room is operated in connection for the convenience of its members. President Dempster, on behalf of the society, extends to all members of the State Society the courtesies and conveniences of the club and dining room when spending any time in Detroit. This invitation is sincere and our members will find a hearty welcome in the new home of the Wayne County Society.

COUNTY SECRETARIES' CONFERENCE

Our annual County Secretaries' Conference will be held in Jackson on April 27, 1927. Detailed information and program will be mailed to every secretary.

These annual conferences have been found to be most helpful and constructive. Interchange of thought, reviewing of our organization's aims and activities, imparting of information and the discussion of individual experiences that characterize these conferences have always resulted in good. Secretaries derive inspiration and help; County Societies, and through them our State Society, reflect increased activity and stimulation by reason of this annual meeting.

Every secretary is urged to attend—he should attend. Every County Society should direct its secretary to attend. Jackson is so located as to be reached conveniently, either by train or automobile. Remember the date, refer to your program that is mailed to you and make it a point to be on hand. Presidents of County Societies are invited to accompany their secretary for a cordial welcome will await them.

CANCER DEATHS

Appended there is a tabulation of deaths from cancer over a five year period. These figures are compiled by the State Department of Health from records on file in its office. They are pertinent at this time in view of the proposed Cancer Education Week that is to occur in May. The need of

such a cancer week is attested by the fact that from 1921-1926 there were 17,694 deaths due to cancer—a yearly average of 3539 or 10 per day. Some of these deaths could have been prevented—more can be

be prevented by education, early examination and the instituting of thorough, effective preventive treatment. These statistics are imparted for your information and study.

STATE AND COUNTIES

	1921	1922	1923	1924	1925	Total 5 years	Aver. 5 years	Aver. rate per 100,000 population
STATE	3,285	3,424	3,472	3,744	3,768	17,694	3,539	91.9
1 Alcona	5	6	4	1	7	23	4	65.4
2 Alger	4	4	9	9	5	31	6	54.1
3 Allegan	47	39	45	44	41	216	43	113.0
4 Alpena	20	28	23	18	16	105	21	117.2
5 Antrim	7	12	7	11	12	49	10	86.6
6 Arenac	7	5	6	7	12	37	7	73.2
7 Baraga	5	2	3	3	3	16	3	36.0
8 Barry	21	34	26	18	23	122	24	110.3
9 Bay	57	69	56	81	66	329	66	93.2
10 Benzie	8	7	3	1	2	21	4	57.6
11 Berrien	65	78	74	87	86	390	78	117.7
12 Branch	41	38	29	35	32	175	35	145.0
13 Calhoun	102	109	92	113	96	512	102	130.1
14 Cass	24	22	25	22	31	124	25	121.1
15 Charlevoix	15	6	13	10	9	53	10	63.3
16 Cheboygan	9	10	12	9	15	55	11	78.1
17 Chippewa	20	10	19	16	20	85	17	67.3
18 Clare	4	5	5	6	4	24	5	60.0
19 Clinton	25	22	24	15	25	111	22	93.5
20 Crawford	1	7	4	4	5	21	4	93.1
21 Delta	23	25	25	24	36	131	26	82.3
22 Dickinson	21	18	13	23	21	96	19	96.7
23 Eaton	34	50	36	40	34	194	39	131.3
24 Emmet	20	18	18	17	24	97	19	120.5
25 Genesee	99	83	109	82	110	483	96	61.9
26 Gladwin	1	8	3	3	1	16	3	32.8
27 Gogebic	9	12	14	22	19	76	15	40.4
28 Grand Traverse	22	36	26	29	20	133	26	133.2
29 Gratiot	33	36	39	29	37	174	35	96.7
30 Hillsdale	45	39	35	36	44	199	39	137.5
31 Houghton	39	54	63	56	57	269	54	74.6
32 Huron	22	28	28	28	24	130	26	78.2
33 Ingham	78	86	90	97	91	442	88	96.5
34 Ionia	42	26	30	35	32	165	35	103.2
35 Iosco	5	3	11	3	3	25	5	59.6
36 Iron	4	7	6	9	13	39	8	33.3
37 Isabella	7	25	13	17	19	81	16	69.8
38 Jackson	78	82	91	93	97	441	88	110.1
39 Kalamazoo	89	86	87	101	93	456	91	120.0
40 Kalkaska	3	4	4	6	5	22	4	70.3
41 Kent	217	252	222	240	250	1,181	236	123.6
42 Keweenaw	6	3	2	5	2	18	3	47.0
43 Lake	4	3	7	2	2	18	3	66.1
44 Lapeer	36	25	29	17	30	137	27	102.9
45 Leelanau	5	8	7	7	8	35	7	77.3
46 Lenawee	60	44	51	51	62	268	53	109.2
47 Livingston	29	25	24	25	23	126	25	140.1
48 Luce	6	5	8	1	4	24	5	72.5
49 Mackinac	9	5	4	6	9	33	6	74.4
50 Macomb	41	37	37	51	46	212	42	105.6
51 Manistee	20	24	15	29	19	107	21	100.4
52 Marquette	35	43	41	50	36	205	41	87.1
53 Mason	28	23	26	22	24	123	24	120.6
54 Mecosta	21	21	19	19	25	105	21	117.9
55 Menominee	19	17	30	25	28	119	24	100.3
56 Midland	11	12	5	10	10	48	9	48.5
57 Missaukee	5	3	5	5	5	23	4	43.8
58 Monroe	36	34	38	35	34	177	35	89.5
59 Montcalm	49	35	33	32	34	183	36	116.2
60 Montmorency	2	—	2	3	—	7	1	22.9
61 Muskegon	68	66	62	64	80	340	68	96.7
62 Newaygo	14	14	13	28	18	87	15	85.4
63 Oakland	73	82	72	99	103	429	86	83.7
64 Oceana	7	23	15	18	17	80	16	102.4
65 Ogemaw	6	4	2	3	7	22	4	50.9
66 Ontonagon	4	9	4	6	10	33	6	42.9
67 Osceola	14	12	20	17	12	75	15	97.5
68 Oscoda	1	1	—	2	2	6	1	56.0
69 Otsego	5	3	4	—	2	14	3	48.7
70 Ottawa	61	45	45	56	43	250	50	102.1
71 Presque Isle	8	10	6	7	7	38	7	54.3
72 Roscommon	2	1	3	4	2	12	2	98.4
73 Saginaw	78	113	108	113	98	510	102	97.4
74 Sanilac	17	28	23	21	21	110	22	69.3
75 Schoolcraft	4	11	4	9	7	35	7	65.3
76 Shiawassee	48	43	34	48	48	221	44	118.2
77 St. Clair	57	49	61	72	66	305	61	100.3
78 St. Joseph	31	36	30	41	21	159	31	111.3
79 Tuscola	29	30	32	27	30	148	29	85.7
80 Van Buren	45	42	43	38	32	200	40	129.0
81 Washtenaw	93	118	123	143	136	613	102	196.9
82 Wayne	802	815	922	1,019	1,045	4,603	921	75.1
83 Wexford	19	11	21	14	22	87	17	90.8

SIMPSON INSTITUTE

The formal dedication of the Thomas Henry Simpson Memorial Institute for Medical Research took place at the University Hospital Feb. 10, 1927. This institute exists as a memorial to the late Thomas Henry Simpson, and it was made possible by a gift of more than \$450,000 to the Regents of the University of Michigan by his wife, Catherine M. Simpson. Half of this grant was spent in constructing the building and the remainder is to be placed in trust and the interest used for salaries of research workers.

The building rests directly in front of the University Hospital and upon the edge of the Huron river valley. Its architecture is very pleasing and harmonizes well with that of the administration building of the University Hospital, directly facing it. The building is placed on a slope so that there are three stories in front and five in back.

The entrance leads into a spacious lobby, paneled in black walnut. At one end of the lobby is a huge fireplace, and at the other end a bronze plaque of the late Thomas Henry Simpson done by Herbert Adams, sculptor.

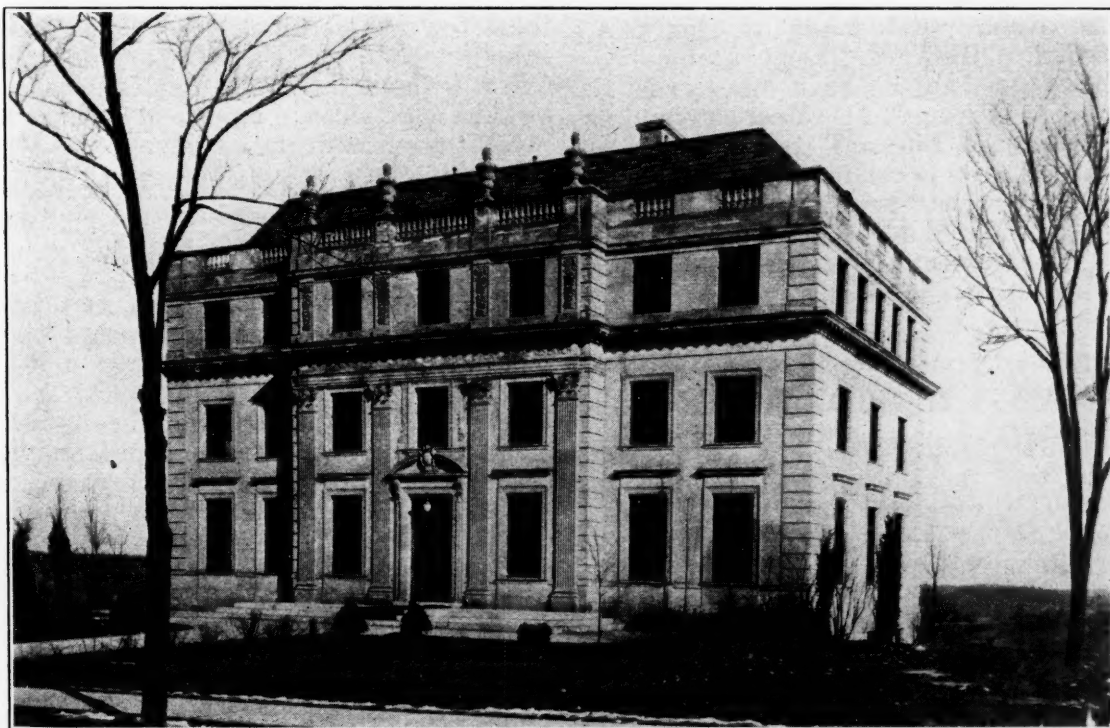
Passing from the lobby across a hallway one enters the library. It is also paneled in harmony with the lobby, with a fireplace at one end and built-in bookcases all about the rest of the room. The ceilings of both lobby and library are frescoed and

the floors are covered with battleship linoleum. The library overlooks the Huron river valley and is a most attractive room. Directly off the library are the offices of the staff, small clinical laboratories and examining rooms.

The second floor is devoted to laboratories, of which there are eight. Three of these laboratories are to be used for chemical, pathological, and bacteriological study; the rest are to be used for the studies of the blood. No expense has been spared in equipping any part of the building or laboratories. All plumbing, fixtures, desks and laboratory benches are of the most modern type.

The third floor is devoted to the clinical study of patients. There are two three-bed wards, one two-bed ward, and one private room, all modern in every respect. The windows of the wards open out on the boulevard.

In the basement and sub-basement are class rooms, with private student entrances, and animal experimental rooms. The animal rooms are so built that they can be cleaned and fumigated at any time. There is equipment for animal surgery and the preparation of animal diets. There is automatic elevator service on all floors and the building is supplied with nursing service, orderly service, and janitor service by the University Hospital. Its proximity to the University Hospital makes



Thomas Henry Simpson Memorial Institute

transportation of patients, staff members and students rapid.

As a whole, the Thomas Henry Simpson Memorial Institute for Medical Research offers an extraordinary opportunity to study, both clinically and experimentally, pernicious anemia. In event the etiology of this disease is sometime determined and its cure known, the Institute will be devoted to general medical research.

During the afternoon of Feb. 10 there was a reception and tea in the library and director's office. Opportunity was afforded at this time for guests to look over the new institute and a group of nurses from the hospital were present to act as guides to those who wished to be taken through the building. The tea tables were presided over by Mrs. C. C. Little, Mrs. J. E. Beal, Mrs. W. H. Sawyer, Mrs. Harley Haynes, Mrs. J. E. Bursley, and Mrs. H. M. Bates. Mrs. Simpson was presented in an informal way to the guests by President and Mrs. Little.

In the evening a dinner was given at the Union for Mrs. Simpson, Dr. H. A. Christian, Dr. C. C. Sturgis, and Dr. Raphael Isaacs. Later, at the amphitheatre of the University Hospital, the formal presentation of the Simpson Memorial Institute to the University was made by Henry Slyfield of Detroit. President C. C. Little accepted the Institute in behalf of the University. Dean Hugh Cabot outlined its coming usefulness and connection with the Hospital and the University. The address of the evening was made by Henry A. Christian of Harvard. Formal announcement of the appointment of Cyrus C. Sturgis as Director of the Institute and as a Professor of Internal Medicine, and of Raphael Isaacs as Assistant Director and as an Assistant Professor of Internal Medicine were made. Both were formerly in the Department of Internal Medicine at Harvard Medical School.

EARLY HISTORY OF SHIAWASSEE COUNTY MEDICAL SOCIETY

The first medical society of Shiawassee county was formed in the late '70s or early '80s, through the efforts of Dr. Colin McCormick, of Owosso, who, by the way, is still in active practice in that city. The local physicians who affiliated at that time were Doctors J. Perkins, J. B. Barnes, C. P. Parkill, J. L. Smith, A. E. Stannard and C. McCormick. Outside the city, the members were, Doctors E. B. Ward of Laingsburg, D. C. Holley of Vernon,

Armstrong and Goodrich of Corunna, J. N. Eldred of Chesaning, O. B. Campbell of Ovid, S. E. Gillman of St. Johns, H. W. Cobb of Perry, and W. C. Hume of Bennington.

Later, the "Owosso Medical Society," on motion of Dr. Holley, was changed to "The Owosso Academy of Medicine," and was so called until the state was reorganized by McCormick of Kentucky, when the name was again changed to "The Shiawassee County Medical Society" and so remained. The original organizer, Dr. C. McCormick, was for seven years the secretary-treasurer, and for five years president under its various names. During those early years many notable men addressed the society at different times, such as McGraw, Shurly, Webber, Carstens and Connor of Detroit; DeNancrede, Peterson, Dock and Darling of Ann Arbor, and lesser lights about the state.

The meetings were always well attended and much interest manifested. An interesting synopsis of the papers and discussions was always furnished the local paper, The Owosso Press, which was read and greatly enjoyed by the people of the county.

Since the reorganization of the society in 1902, there have been a total of 95 members, at various times. Many of these have passed to the great beyond, some have removed to other fields of labor, and a few have gone to sleep as far as a medical society is concerned. And by the same token, these few are doing themselves a greater injustice than the society, for the latter exists without them, but they can scarcely be said to be alive in a medical sense, with no affiliation with the society.

W. E. Ward, Secretary-Treasurer.

MATERNITY SURVEY

It is purposed to conduct a maternity survey of the state. The proposed plans contemplate an intensive study and inquiry into the medical and social factors involved and evidenced in the prenatal state, the confinement provisions and attendance, end results to mothers and infants and a summarization of these and other incidental factors. The actual field work will be under the direction of Dr. Kiefer, Commissioner of Health, in conjunction with the Society's Committee on Public Health. The Council has voiced its approval of this study and assured the Commissioner of our co-operative support and assistance. It is hoped that there will

result from this study an organizational movement that will enhance the welfare of pregnant women and cause them to be surrounded with the best of scientific care during pregnancy and labor.

It must not be assumed or implied that this undertaking is the initiative of any proposed plan of state medicine or state endeavor to usurp any physician's rights or practice. No such ulterior purpose attends this study. The basic, sole thought is to obtain existing facts and study existing conditions and eventually to educate the public. To that end the following letter has been approved and will be presented wherever the state representative may call. Our members are urged to accord to this representative every possible assistance in order that the desired information may be obtained in fullest detail. The results and findings will be imparted in the report of our Committee on Public Health. It is contemplated to undertake this work during the first part of April.

To the Medical Profession of Michigan:

The Michigan State Medical Society is making a study of maternal mortality in Michigan. Through the courtesy of the State Department of Health, the Medical Society has secured the services of Dr. Dorothy L. Green who presents this letter to you.

The study is to be made of the reported deaths in cases connected with childbirth and the actual facts will be ascertained for the future guidance of the medical practitioners of Michigan. There will be no publicity in regard to any individual case or in regard to any doctor.

As president of the Medical Society of Michigan I feel that I am voicing the sentiment of the Society in asking that you assist Dr. Green in making this study in every way that you can. Any statement that you make to her in regard to your patient will be considered as entirely confidential. This work is to be carefully and painstakingly performed, and should accumulate statistics the analysis of which will be of great value to the general practitioners and the obstetricians of Michigan.

Again hoping that you will heartily co-operate with Dr. Green, I am,

Very sincerely yours,
J. B. Jackson, President.

EUTHANASIA

We are not purposing to discuss euthanasia—we are simply imparting the following incident. It does furnish a text but we desist sermonizing and moralizing.

The letter left by Dr. E. W. Ruggles of Chicago to the editor of *The Day Spring* appears below. The letter was begun on December 29, and written progressively as the fatal disease progressed. The last entry was written February 25, only three days before his death on February 28. It

was mailed after the physician's death and reads:

* * *

December 27, 1926.

My dear Cochrane:

It is quite probable that some time during the next few weeks you will have occasion to comment on the passing of another of "Hartford's Illustrious Former Citizens"—"the first graduate of the Hartford high school," and all its usual adornments.

Thank you for past favors—but this is different!

I have always said that I would never die of any painful and lingering illness—of course, meaning cancer. And now I have cancer of the throat, which is the most unfortunate place in our whole anatomy to have cancer—hurts all the time, hurts when you swallow food or even saliva, and especially hurts at night. So what is a person to do under these circumstances?

This condition dates from last winter. Of course, I have had supposedly the best of treatment, but everything seems to fail in cancer of the throat. So all I have to do is to calmly wait for death by starvation or some intercurrent malady, and, as I figure, old nature will come to the rescue sometime next summer and release me from my suffering.

But isn't it fine that we doctors have it in our power to do euthanasia on ourselves, when we would probably be put in jail if it could be proven that we did it on any one else? So me for euthanasia—and all arrangements are made.

The most comforting thought I have when suffering pain and knowing of more to follow is that I have it in my power to end it at any time—just go to sleep. I know that this idea is quite contrary to general opinion, but it is an opinion that I have held for many years.

* * *

February 1, 1927.

At this date the condition is slowly progressive. I see no reason for changing any of the sentiments expressed in the preceding, and at the proper time will carry out my plans.

* * *

February 25, 1927.

At this time the suffering has markedly increased, so that it would be practically unendurable unless I were given something to relieve the pain. There is no pleasure or satisfaction in living under such conditions. I am only waiting now for some business to be finished up and then I will be ready for that nice, long sleep.

You may publish this if you wish. It ought to make a good subject for discussion.

Sincerely yours,
E. W. Ruggles.

* * *

A victim of cancer of the throat, and realizing that his case was hopeless, Dr. Ruggles carefully closed up his business affairs, transferred his property to his wife, made all arrangements for the disposition of his body, and ended his suffering by injecting 20 grains of morphine into his veins.

That the end had been carefully planned over a period of months, as the incurable disease progressed, was indicated by four letters written by Dr. Ruggles and left on his office table.

One of the letters was addressed to the editor of *The Day Spring*, and is published. Another was addressed to his wife, and a third to the coroner explaining his act, and one to the under-

takers he desired to handle his funeral arrangements.

Although Dr. Ruggles had kept his affliction a secret from all save his wife and his most intimate friends, there were in the funeral party three of his closest personal friends to whom the physician had confided his plans.

Strangely enough, each of the three men had been sworn to secrecy and thought he was the only one who knew. It developed that each had tried to dissuade Dr. Ruggles, but had been convinced by the physician that his plan was best. All three had been given identical instructions, indicating that the physician had not rested upon the uncertainty of one friend surviving him—and had depended upon one friend remembering the instructions that another might forget.

The three knew nothing of the manner or time that the physician intended to escape his suffering, but only that he contemplated evading the last agony of death from the dread disease from which he was suffering.

Dr. Ruggles did not formulate his carefully laid plans until convinced that his case was hopeless. He had been at the Mayo Brothers hospital at Rochester, Minn., telling his patients in Chicago that he was going to the clinic. He had consulted the best specialists in Chicago, but they gave him no hope.

Knowing that his trouble could not be cured, he began last fall making arrangements with his bankers to transfer his property to Mrs. Ruggles. Since the first of the year he had declined to take new patients, telling them that he was going away, but continued his office practice at 6856 Wentworth avenue.

On Monday, February 28, Dr. Ruggles left his home at 10:30 in the morning. When he failed to return at 6 o'clock in the evening and Mrs. Ruggles had failed to get a response to her repeated telephone calls, she called Harry Mayzels, a druggist above whose store Dr. Ruggles had his offices. He found the physician dead on a bed in an inner room. Dr. C. S. Salmon, 6255 Ashland avenue, a friend of Dr. Ruggles, was called. He declared that the physician had been dead since 1:30 in the afternoon. The note left by Dr. Ruggles to the coroner stated that the morphine was administered at 1:20.

OPIUM LICENSES TO CULTISTS

Under ruling of the Department of Internal Revenue, Washington, District Collectors may issue a license to dispense opium, etc., to osteopaths provided the state does not prohibit such practice on the part of osteopaths. A number of years ago the ruling of our attorney general prevented the issuance of such a license. With a new administration and a new attorney general that ruling was reversed and the license issued so that for several years osteopaths have been dispensing opium, etc.

Shortly after January 1st of this year, the Board of Registration appealed to the attorney general for a review and a new ruling. This has been rendered and reverses the previous ruling and is quoted:

Osteopathic Practitioners: May not administer narcotics.

January 19, 1927.

L. A. Potter, Inspector, Department of Health, State Building, Lansing, Michigan.

Dear Sir:

Under the provisions of the Harrison Narcotic Law, so-called physicians, dentists and veterinary surgeons are required to register with the Commissioner of Internal Revenue in order to dispense, distribute or prescribe certain narcotics without violating the terms thereof. You have requested the opinion of this Department as to whether, under the statutes of this state, osteopathic physicians are authorized to administer the narcotics included within the Harrison act, as a part of or incident to the practice of their profession.

The practice of osteopathy is regulated by Act No. 162 of the Public Acts of 1903, as amended, being sections 6740-6747, C. L. 1915. Section 1 of the Act creates the State Board of Osteopathic Registration and Examination, and provides for the manner of registering applicants for licenses to practice. Section 2 provides that if an applicant shall possess certain requirements therein specified, he shall, before being granted a license to practice, submit to and satisfactorily pass an examination, and

"If such examination be passed in a manner satisfactory to the board, then the board shall issue its certificate granting him the right to practice osteopathy in the State of Michigan, in all its branches as taught and practiced in the recognized colleges and schools of osteopathy."

Section 4 of the Act provides as follows:

"The certificate provided for in section 2 of this act shall entitle the holder thereof to practice osteopathy in the State of Michigan in all its branches as taught in the recognized schools of colleges of osteopathy, *but it shall not authorize him to practice medicine within the meaning of Act 237 of the Public Acts of 1899, or acts amendatory thereto*; Provided, That nothing in this act shall be construed as to prohibit any legalized osteopathic physician in this state from practicing medicine and surgery after having passed a satisfactory examination before the State Board of Medical Examiners in the State of Michigan * * *."

The legislature in enacting this act clearly had in mind a well defined distinction between the practice of medicine as defined by the laws regulating physicians and the practice of osteopathy.

Section 4 above quoted expressly provides that the certificate shall not authorize the holder thereof to practice medicine within the meaning of that term as defined in the laws regulating physicians. Indeed, it would seem that the legislature had contemplated future presentment of the question now before us, for in section 7 of the act, it defined the method of treating diseases known as osteopathy as follows:

"This system, method or science of treating diseases of the human body known as osteopathy is hereby declared not to be the practice of medicine or surgery within the meaning of

Act No. 237 of the Public Acts of 1899 * * * and clearly indicated that it had in mind when enacting this regulatory legislation, the then well understood osteopathic method of treatment of diseases of the human body by manipulation by the hands. In 21 Ruling Case Law, page 371, it is said:

"Osteopathy is a well recognized school of healing which does not require just the same

kind of knowledge as do surgery or materia medica. The failure of a legislature to provide for the special examination of osteopathy may mean an intention not to include them within the prohibition. Also the danger attendant on manual manipulation is not the same as the danger attendant on surgical operations or the administration of drugs. * * *

It is my opinion that the administration of narcotics is not a part of or incident to the practice of osteopathy as contemplated by the Michigan statute, but rather involves necessarily the practice of medicine; the right to practice medicine being expressly denied to an osteopathic unless such osteopath is a registered physician.

Vtry truly yours,
Wm. W. Potter, Attorney General.

The matter has been presented to the Internal Revenue Department at Washington and to the revenue collector of Michigan.

DUES

This issue marks the last one that will be received by members who have not paid their 1927 dues. We have no option in the matter; to discontinue sending is a postal regulation. Members who have failed to remit to their local secretaries are requested to do so at once.

MONTHLY COMMENTS

Medical—Economic—Social

By the aid of our daily press, college and high school suicides have been played up with considerable prominence. We are not disturbed for it is apparent that this suicidal tendency is not bound to be epidemic—it's average is fairly established. The following two poetical verses are of interest by reason of the variance of sentiment expressed. George Stirling died by his own hand and The San Francisco Call and Post prints what is believed to be his last poem—a plea for the right to die as he did.

Has man the right
To die and disappear,
When he has lost the fight?
To sever without fear
The irksome bounds of life,
When he is tired of the strife?
May he not seek, if it seems best,
Relief from grief? May he not rest
From labors vain, from hopeless task?
—I do not know; I merely ask.

Or must he carry on
The struggle till it's done?
Will he be damned, if he,
World-weary, tired and ill,
Deprived of strength and will,
Decides he must be free?
Is punishment awaiting those,
Who quit, before the whistle blows,
Who leave behind unfinished task?
—I do not know; I merely ask.

To which we submit in reply these lines by
Charles Hanson Towne:

When he went blundering back to God,
His song half written, his work half
done,
Who knows what paths his bruised feet
trod,
What hills of peace or pain he won!

I hope God smiled and took his hand,
And said, "Poor truant, passionate fool!
Life's book is hard to understand,
Why couldn't thou not remain at school?"

The Annual Meeting of the A. M. A. will be held in Washington the week of May 15th. Hotel reservations should be made at an early date.

Letters have been addressed to County Secretaries to nominate a local representative to aid Mrs. Crane's committee in organizing local women's auxilliary societies in affiliation with each county unit.

The Annual County Secretaries Conference will be held in Jackson on April 27th. County Presidents are urged to arrange so that the local Secretary will be present. The detailed program will be mailed to each Secretary.

Turn to the article in this issue: "Michigan One Hundred Years Ago." It is a fascinating narrative and imparts interesting details as to practice in the region of Detroit and Pontiac a hundred years ago. The article will be concluded in our next issue.

Councilor Ricker recently suggested a rostra of members in good standing in County Societies constituting our State Society. He urged that such a rostra, supplied to each member and placed on his reception room table would have a twofold purpose. First, it would acquaint the public as to what doctors are in good professional standing and affiliated with the recognized medical organization of the county and state. The public knows that a man to attain membership must have essential personal qualifications and be possessed of a certain standard of professional education. Second, men who have been indifferent or luke warm to society affiliation will perceive a new reason for obtaining membership. Consequently the Council has directed that such a rostra be published and supplied to each member in good standing. This will be issued about May 1st. It will include only the names of members whose 1927 dues are paid. Secretaries are requested to draw their members attention to this fact.

O U R O P E N F O R U M

Affording Opportunity for Personal Expression

Editor of The Journal:

There is so much to commend in the present make-up of the Journal and so much of its contents which interests me personally that I wish to express my admiration and to extend congratulations. I cannot but marvel at the results you have obtained.

Sincerely,

Andrew P. Biddle.

And here goes our joy. Apologies to the New York State Journal of Medicine.

Editor of The Journal:

We always await with eager expectation the Journal of the Michigan State Medical Society, and frequently take occasion to quote from it, for it always contains novel selections and excellent information.

We are quoting your report regarding your Journal in the March 15th issue of our Journal. We commend you for your excellent showing.

We are well aware of the trials and tribulations of an Editor, and of the ever present possibility of some omission or commission, which may not be of importance, but which is often irritating. We note on page 221 of your March issue an editorial which is reprinted word for word from our Journal of February 15th. I know that you will pardon me, if I call your attention to the fact that no credit whatever is given to our Journal. The article as it stands appears as if it were written originally by your editorial staff. While we are exceedingly flattered by your choice of it, yet we would have felt still more so, if you had, at the end, credited it to the New York State Journal of Medicine.

Congratulating you on your excellent Journal, we are

Yours sincerely,

Frank Overton, M. D.
Executive Editor.

March 10, 1927.

Doctor Frank Overton,
2 East 103rd Street,
New York City, N. Y.

My Dear Doctor Overton:

This acknowledges receipt of your letter of March 8th and I appreciate the kind things that you say about the Michigan Journal which would express my sentiments if I inserted for the word Michigan the New York State Journal. Then you go on and take out all the joy that there is in life and point out the glaring error that occurred in our March issue. I knew that I should not have gone to New York, where I was during the time that our Journal was on the press and being mailed, thus foregoing my usual custom of checking over the final page proofs before the press run started, to check just such errors.

Of course we acknowledge openly and frankly that the article referred to was lifted bodily

from the New York State Journal of Medicine and was used for the purpose of a filler, as you and I are often compelled to supply such additional space at the last moment. Our printer failed to note, as was noted on the copy that was sent him, that this was from your Journal and that credit should have been given accordingly. This is but an incident of the trials and tribulations that you refer to and it always happens when we think the sun is shining most brightly.

We have no desire to indulge in plagiarism and regret the incident for which proper amends will be made in our next issue. I have just about come to the conclusion that it is not safe to let any issue go to press without a final check of the page proofs and by reason of that our visits will have to be planned at other periods of the month, but in this instance I was compelled to go and had no other alternative.

Assuring you of our appreciation for calling our attention to this fact and tendering you our hearty wishes for a continuation of the good work that you are doing with the New York Journal, I am

Yours very truly,

Secretary-Editor.

Editor of The Journal:

I wish to presume upon your patience somewhat, because I cannot refrain from writing you in regard to your new State Journal. Being a diligent reader of the Journal for many years I feel that we owe you a great debt in your constant care for our interests in helping to supply the modern medical literature, and I address you today especially on account of this most excellently built and complete medical journal especially since the January number of this year. We have reasons to be proud of it.

Sincerely yours,

Simon Levin, M. D.

Editor of The Journal:

Enclosed you will find a check for \$5.00. I wish to enter my subscription for one year for The Journal of the Michigan State Medical Society.

By way of introduction, I might say that I graduated in the class of '19 from the Detroit College of Medicine and Surgery. Later came to Mexico, in general practice in Mexico City for three years and four in this hospital. We have 40 beds and do a considerable amount of surgery. I am planning to return to the states in the spring and locate in Michigan. I prefer surgery and have been successful in it, however I shall be obliged to take advantage of whatever opportunity that may present itself.

I do not know the price of the Journal, if not sufficient the proper amount will be forthcoming on being advised as to the subscription price.

Faithfully yours,

C. R. Illick.

Editor of The Journal:

If history is history it should be accurate and with this object in view I desire to make a few corrections in the history of the Wayne County Medical Society published in the March number. This article states that the Wayne County Medical Society appears to have ceased in 1876, but the fact is that at least from 1891 until 1902 it was a thriving organization. Its rival during part of the time was the Detroit Medical and Library Association, which disbanded about 1900, to be succeeded by the Detroit Medical Society, and these were the two large societies in Wayne County at the time when the reorganization of the A. M. A. went into effect in 1902. This reorganization made one County Society in each county the unit of membership in the State Medical Society, and of the A. M. A. Hence, it was necessary for the Detroit profession to amalgamate. A plan for amalgamation was proposed at a largely attended meeting in September, 1902. This plan provided for disbanding existing Societies and forming a new Society to be called the Wayne County Medical Society. Unfortunately for initial harmony, three members of the old Wayne County Medical Society claimed that their Society was incorporated and could not be disbanded with their objection and the outcome of this anticipatedly harmonious meeting was that the Detroit Medical Society disbanded and its members joined the old Wayne County Medical Society, which was then incorporated. Another inaccuracy is the date of purchase of a permanent home at 33 High Street East, which was July 1st, 1910, and not 1909.

Yours very truly,

F. B. Tibbals.

Editor of The Journal:

The Illinois State Medical Society is running a special train to Washington, D. C., over the Pennsylvania railroad for the A. M. A. meeting in May.

Will you, in the forthcoming issues, announce this for us in the valued columns of your much-read Journal?

Chicago is the transfer terminal for physicians coming from your district. Travel on this special train will undoubtedly hold many pleasurable features that otherwise would be unavailable. In addition to this opportunity for fraternization among doctors from Illinois and states north and west, there is a certain amount of professional pride in making of this "Special" a banner train.

Cordially, as ever,

Charles J. Whalen, M. D.

Editor of The Journal:

At the meeting of the Board of Trustees of the American Medical Association held in November, 1926, a recommendation was adopted expressing the hope that the Council would "undertake to have lectures on medical ethics made a part of the curriculum in every approved medical school." This matter was taken up at the business meeting of the Council on February 13, 1927, and the following report was unanimously adopted:

"The Council on Medical Education and Hospitals of the American Medical Association recommends that adequate instruction in the tra-

ditions and principles of medical ethics be included in the required curriculum of all medical students. While realizing that the subject is now touched upon in all schools, and that its principles can be inculcated by example, yet the Council believes that detailed and sympathetic explanation of the 'Principles of Medical Ethics,' as formulated by the American Medical Association should be the minimum of the formal instruction given in medical schools.

"The Council suggests that the subjects of medical economics, medical jurisprudence, medical history and perhaps also in some instances pastoral medicine might be conveniently grouped with that of medical ethics under the general title of the 'Social Relations of the Physician.'

"The Council recommends also to the American medical profession through its national, state and local organizations that it seek to adequately familiarize its members with the same material suggested for medical students."

With the tremendous increase in the knowledge of medicine and the added complexity in medical practice, including the increasing extent to which hospitals are being utilized in practice, the matter of medical ethics and the importance of maintaining a high degree of integrity on the part of hospital staffs are coming to be more and more important.

Very sincerely yours,

N. P. Colwell, Secretary,

Council on Medical Education and Hospitals.

Editor of The Journal:

You certainly get results when you go after anything. The offender is very much chastened—I hope permanently. I do not like friction.

Just what was done here I do not know—that is unnecessary. However, I could not let the matter close without thanking you for your lively interest and co-operation.

Yours very truly,

J. F. Heffernan, M. D.

COMMITTEE OF REVISION OF THE PHARMACOPOEIA OF THE UNITED STATES OF AMERICA, 1920-1930

Editor of The Journal:

The chairman of the United States Pharmacopoeia Revision Committee has asked the Subcommittee on Therapeutics and Pharmacodynamics to address to you a statement explaining the purpose of the presentation of the volume of the Tenth Revision of the United States Pharmacopoeia, which was forwarded to you a few days ago. This object is partly to make it convenient for you to familiarize yourself with the rather important changes, the additions, deletions, and modifications of titles, that have been made in this revision. The chief object, however, is to enlist your assistance, and to give you some help in bringing the ideals of the Pharmacopoeia to the attention of your students; to acquaint them, through you, with the existence of this work and with the objects that it represents; to point out how these aims serve and deserve their professional interest; and to make them somewhat familiar with the book as a reference work of authoritative information. It is especially important that medical students should have convenient ac-

cess to the copy of the Pharmacopoeia as a reference book, since it is not intended as a medical text-book.

As you know, the immediate purpose of the Pharmacopoeia consists in providing standards for the standard drugs, and in this it may be truthfully said to reflect the best practice of the American medical and pharmaceutical professions. By giving official recognition, sanction and encouragement to the best, it serves as a powerful incentive and means for improvement and progress of the two professions who own it in common, and who manage it by a democratic system that should and does make the Pharmacopoeia representative of, and responsive to, the whole membership of both professions. Indeed, one of the objects of this presentation is to keep up interest in this popular control, so that the students, who will be practitioners by the time of the next Pharmacopoeial Convention, will help to elect and send competent representatives.

The last Committee of Revision took the wise step of dividing the work and responsibility of the revision fairly definitely between the two professions, according to their special training. The selection of the "best" drugs and preparations, the assignment of their dosage, the elaboration of bio-assays, and other matters requiring medical knowledge were left essentially to the physicians of the Revision Committee; while the pharmacists, chemists and botanists were charged with the working formulas, tests, etc. This division increased the general efficiency and worked out very happily.

The selection of the "best" in drugs is necessarily a delicate undertaking; but the committee tried faithfully to act in harmony with the tendencies of modern medicine; to eliminate what seemed at present useless or practically superfluous; and to add the new drugs whose value had been fairly definitely established. This was made possible by the authorization to admit drugs protected by patent, as is the case with so many of the synthetic chemicals. Accordingly, the present Pharmacopoeia was able to include standards, and incidentally non-copyrighted names, for the arsenamines; procaine (novocaine) and other synthetic anesthetics; chaulmoogra oil and ethyl chaulmoograte; amidopyrine (pyramidon); the colloidal silver preparations, mild and strong; barbital (veronal) and phenobarbital (luminal); calcium iodobenzenate (sajodin); carbromal (adalin); chloramine (chlorazene) and dichloramine; epinephrine (adrenalin); thyroxin, and a number of others. To an increasing extent, teachers and students may find it profitable to look upon the titles of the Pharmacopoeia as a basic reference list of drugs and preparations of worth; but even those who may not agree with the committee in all its decisions will find the list of additions and deletions at least quite interesting. Incidentally strict adherence to the official names and abbreviations helps to avoid confusion in prescribing and in dispensing. A list of preparations is given under each drug, as also the ordinary dose, in both metric and apothecaries system.

The bulk of the text of the Pharmacopoeia consists of working directions for preparations and for testing, which are very important to pharmacists and indirectly also to physicians, since they insure uniformly high quality of the drugs; but the details of much of this text are not in the providence of medical men. There is, however, quite a number of other valuable features, which make the Pharmacopoeia a very handy source of useful information. These are best appreciated

by examining the table of contents, on pages III and IV of the book, or better still, by running through its pages. We would mention especially the authoritative definitions and descriptions; the physical constants such as solubilities, melting points, etc.; the admirable succinct "Identification Tests for Chemicals," pp. 440-444; the descriptions of standard analytical procedures and methods; the formulas for test solutions and equivalents; tables of formulas and molecular weights of a large list of chemicals; of equivalents of temperatures, of weights, and of measures—all in convenient form and reliable. The descriptions of the bio-assays are of especial interest to pharmacologists. It is interesting to recall that the United States Pharmacopoeia has set the pace for the world in this subject.

Our sub-committee ventures to suggest that you take occasion to point out to your students the value of our national Pharmacopoeia in these various directions; that you encourage them to become familiar with it, and to this end, that you place the volume in your library or laboratory, where the students may have access to it.

Very respectfully yours,

W. A. Bastedo

H. C. Wood, Jr.,

Thorald Sollmann, Chairman of
the Sub-Committee on Therapeutics and Pharmacodynamics.

THE JOURNAL
IS
YOUR FORUM—
WE INVITE YOU
TO UTILIZE
IT FOR THE
EXPRESSION OF
YOUR VIEWS
ON
MEDICAL SUBJECTS

NEWS AND ANNOUNCEMENTS

Thereby Forming Historical Records

Dr. V. H. Kitson has re-located in Ionia.

Dr. W. A. Evans of Detroit is president of the Detroit Board of Health.

Dr. B. R. Shurly is a candidate for membership on the Detroit Board of Education.

Dr. G. L. LeFevre's home, Muskegon, was destroyed by fire on February 28.

Dr. A. E. MacGregor was recently appointed chief of staff of the new Post-Montgomery Hospital, Battle Creek.

Dr. Alexander W. Blain has been re-appointed a member of the Detroit Public Welfare Commission by Mayor John Smith for a period of four years.

At the annual meeting of the Federation of State Medical Boards of the United States, held in Chicago, February 16th, the following officers were elected:

President-Elect, Guy L. Connor, M. D., Detroit, Mich.; Vice-President, Henry M. Fitzhugh, M. D., Westminster, Md.; Secretary-Treasurer, Walter L. Bierring, M. D., Des Moines, Ia.; Member of Executive Council, Charles B. Kelley, M. D., Jersey City, N. J.

Dr. Byron U. Richards, of Pawtucket, R. I., is the present President of the Federation.

NOTICE

The National Association for the Study of Epilepsy will hold its next annual meeting at Cincinnati, Ohio, on May the 30th and 31st, 1927, immediately preceding and in joint session with the American Psychiatric Association. Papers will be read by Doctors Bass of Texas, Syz of Baltimore, Clark of New York, Pollock and Davis of Chicago, Shanahan of Sonyea, Notkin of New York, Sharp of Buffalo, Odell of Clinton Springs and others.

We would appreciate your giving some publicity to this notice in your Journal.

Respectfully,

G. Kirby Collier, M. D.

A. L. Jacoby, A.B., M.D., Director of Neuro-Psychiatry of the Harper Hospital and Director of the Psychopathic Clinic of the Records Court, will present the next paper to the Highland Park Physicians' club, Thursday, April 7, 1927, at the Highland Park General Hospital at 8:30 p. m.

Subject: "The Next Step in Preventive Medicine."

Dr. Jacoby has had a wide experience in neuro-psychiatry, having served as assistant in psychiatry at the State Psychopathic Hospital, Ann

Arbor, Michigan, and had charge of the psychiatric department at the Naval Hospital at Portsmouth, Me.

The members of the Michigan State Medical Society are invited to attend this meeting.

The Highland Park Physicians' Club,
Chas. J. Barone, Secretary.

The following is the program for the Tri-State Medical Association:

PROGRAM

Morning Session

Tuesday, April 12, 1927

Clinics 8:30 A. M. to 12:00 M.

Clinic Hospital

Clinics Arranged and Conducted by the La Porte County Medical Society.

1. Post-operative Complications.

Dr. J. H. Andries, Prof. of Surgery, Detroit Medical College, Detroit, Mich.

2. General Medical Clinic.

Dr. Charles Phillips Emmerson, Dean and Prof. of Medicine, Indiana University School of Medicine, Indianapolis, Ind.

3. Heart Clinic.

Dr. Charles Louis Mix, Prof. of Medicine, Loyola University, Chicago, Ill.

4. Goitre Clinic.

Dr. Charles A. Elliott, Prof. of Medicine, Northwestern University, Evanston, Ill.

5. Joint and Bone Clinic.

Dr. Kellogg Speed, Associate Prof. of Surgery, Rush Medical College, University of Chicago.

Luncheon at 12:00 M. Clinic Hospital.

Afternoon Session

2:00 P. M.

Spaulding Hotel, Ball-room

1. The Alleged Tremendous Increase in Heart Disease of Late Years.

Dr. J. H. Upham, Prof. of Medicine, Ohio State University, Columbus, Ohio.

Discussants—

Dr. J. M. Gordon, South Bend, Ind.
Dr. Miles Porter, Jr., Ft. Wayne, Ind.

2. Neurasthenia and Psychasthenia from the Internist's Point of View.

Dr. Charles Phillips Emerson, Dean and Prof. of Medicine, Indiana University School of Medicine, Indianapolis, Ind.

Discussants—

Dr. Louis A. Miller, Toledo, Ohio.
Dr. William M. Donald, F.A.C.S., Detroit, Michigan.

3. X-ray Studies of the Normal and Pathological Gall Bladder.

Dr. Preston M. Hickey, Prof. of Roentgenology, University of Michigan, Ann Arbor, Mich.

Discussants—

Dr. John T. Murphy, Toledo, Ohio.
Dr. Stanley A. Clark, South Bend, Ind.

Banquet 6:30 P. M.

Spaulding Hotel, Ball-room.

Evening Session

8:00 P. M.

Spaulding Hotel.

Some Problems Connected with the Diagnosis and Management of Non-malignant Affections of the Colon.

Dr. Frank Smithies, Prof. of Medicine, University of Illinois, Chicago, Illinois.

All Papers Will be Open for General Discussion.

OFFICERS

Dr. H. H. Martin, President.....LaPorte
Dr. Wm. Donald, Vice-President.....Detroit
Dr. R. V. Hoffman, Treasurer.....South Bend
Dr. W. W. Beauchamp, Secretary.....Lima

COUNSELLORS

Dr. Miles F. Porter, Sr.....Ft. Wayne
Dr. M. A. Mortensen.....Battle Creek
Dr. John Gardiner.....Toledo

DEATHS

IN MEMORIAM

Dr. Daniel Geib was born at Elmira, Ontario, February 8, 1855, and died at Detroit, Michigan, February 17, 1927. He attended the Rockwood Academy, Rockwood, Ontario, and was graduated in medicine at the University of Michigan in 1879. For a time he practised in Arlington and Cambria, Wisconsin. In 1887 he located at Groton, South Dakota. In 1915 he came to Detroit where he was in active practice until he retired one year ago. He had served as President of the Aberdeen, (South Dakota) District Medical Society and for a number of years was Councillor of that District to the State Society.

In January, 1927, he was elected to Honorary Membership in the Wayne County Medical Society. He was a member of the American Medical Association, Michigan State Medical Society, Wayne County Medical Society and the East Side Physicians Association.

He was married in 1880 to Louisa Davis of

Vandecar, Ontario, who with four children, Doctors L. O., and O. D. Geib, of Detroit, Gladys Geib and Mrs. Jay Reeves of Marshfield, Oregon, survive him.
E. L. R.

Dr. Walter G. Welz, a prominent obstetrical specialist, died suddenly at Providence Hospital, Detroit, March 8th, 1927. Dr. Welz was a graduate of the Detroit College of Medicine and received post-graduate work in Virginia. At the time of his death he was chief of staff at the Herman Kiefer and Women's hospitals. He was a member of the Wayne County Medical Society, the Michigan State Medical Society and the American Medical Association.

Dr. William G. Hastie, 2556 W. Grand Boulevard, Detroit, died March 5th. Dr. Hastie was 67 years old and was born in Guelph, Ontario, but when a small boy came to Detroit. He was a graduate of the Detroit College of Medicine. Dr. Hastie had practiced in Detroit for thirty-two years, was a charter member of the Wayne County Medical Society and a member of the Michigan State Medical Society.

Dr. Johnston B. Kennedy was born in Brampton, Peel County, Ontario, May 8, 1858, and died at Detroit, Mich., March 5, 1927. He attended the high school of Brampton, then studied pharmacy at the Ontario College of Pharmacy, from 1876 to 1879. His medical study was begun at Trinity College, Toronto, from 1881 to 1884, then coming to Detroit he received his degree in medicine from the Detroit College of Medicine in 1885. This was followed by post-graduate study in London and Berlin. His practice, which has been entirely in Detroit, was confined to surgery, in which department he was consultant to Grace Hospital. He had, at different times, many allied medical interests, having served as county physician from 1894 to 1896, and for a number of years following 1913 as president of the Board of Health and as a member of the Wayne County Board of Pension Examining Surgeons.

Dr. Kennedy's interests extended beyond the limits of his own profession, his attention always being engaged by anything that he believed would further the best interests of Detroit. For seven years he served as a valued member of the Library Commission, being especially active on that board during the construction of the new Library building. His activities extended, also, into the world of business, including directorships in the Board of Commerce, U. S. Mortgage and Bond company, and the Metropolitan Investment company.

During the World War, Dr. Kennedy was commissioned a captain, though because of his age he was not placed on the active list. He was a member of the American Medical Association, Michigan State Medical Society and Wayne County Medical Society and the American College of Surgeons, and in the Masonic order was a Knight Templar.

In June, 1885, Dr. Kennedy was married to Miss Jessie Young, at Vittoria, Canada, by whom, with three sons, Frederick J. and Doctors Charles S. and William Y., he is survived.

E. L. Robinson,

Chairman Necrology Committee.

COUNTY SOCIETY ACTIVITY

Revealing Achievements and Recording Service

HOUGHTON COUNTY

The regular monthly meeting of the Houghton County Medical Society was held at the Miscoaubik Club at Calumet, Mich., Feb. 1, 1927. Nine members were present.

Dr. K. C. Becker, presented a case of "Perthus" disease.

Dr. M. D. Roberts gave a very good paper on "Aviation Medicine."

Alex B. MacNab, Secretary.

TUSCOLA COUNTY

At the meeting of the Tuscola County Medical Society Feb. 24. The officers for 1927 were elected as follows:

President Dr. R. L. Dixon, Wahjemega; Vice-President, C. N. Race, Caro; Secretary-Treasurer, C. W. Clark, Caro; Delegate to State Society, J. G. Maurer, Reece; Alternate, R. A. Townsend, Fairgrove.

C. W. Clark, Secretary.

GRATIOT-ISABELLA-CLARE COUNTY

The February meeting of the Gratiot-Isabella-Clare County Medical Society was held in the Alma City Hall, Wednesday, Feb. 16 at 8 p. m. One out of town speaker was Dr. Walter E. King of Detroit, subject, "Newer Developments in Biologic Therapy." The doctor's talk proved very interesting.

E. M. Highfield, M. D., Secretary.

BERRIEN COUNTY

The February meeting of the Berrien County Society was held at the Hotel Vincent in Benton Harbor. Excellent papers were given by the State President, Dr. Jackson, on "Diagnosis of Gall Bladder Disease," and by Dr. Boys of Kalamazoo Academy on, "Treatment of Burns," illustrated with moving pictures.

Committees were appointed for Cancer Week observance. A resolution was passed urging the State Legislature to approve the appropriation for a new Tuberculosis Sanitarium at Ann Arbor and to defeat the bill known as Senate Act No. 22 File No. 21 introduced to repeal the bill providing for the erection of the Sanitarium at Ann Arbor.

W. C. Ellet, M. D., Secretary.

GOGEBIC COUNTY

At the regular meeting of the Gogebic County Medical Society held in Grand View Hospital on March 11, Dr. H. F. Ringo read an interesting and stimulating paper on "Periodic Health Examinations." It was followed by a lively discussion in which every member present took part. A resolution was passed to devote twenty minutes of each meeting during the current year to the subject of periodic health examinations.

The average attendance thus far in 1927 has been good. Out of a membership of 29, the attendance in the January meeting was 20, in February 21, and in March 15.

In the April meeting Dr. Nelson M. Black of Milwaukee, Wis., will lecture on "Injuries of the Eyes."

Louis Dorpat, Secretary.

BRANCH COUNTY

The Annual Meeting of the Branch County Medical Society was held Feb. 8, 1927 at the Arlington Hotel, where a chicken dinner was given by Dr. R. L. Wade, the retiring president. The following business was then transacted before proceeding to the election of officers.

By request from Dr. Becker, his membership was transferred to the Calhoun County Medical Society. The application of Dr. A. R. Callendar and Dr. Dobson were accepted.

The following officers were then elected for the ensuing year: President, Dr. A. G. Holbrook; Vice-President, Dr. S. E. Fae; Secretary-Treasurer, Dr. E. E. Hancock; Delegate, Dr. W. A. Griffith, and Alternate, Dr. W. W. Williams.

B. W. Culver, M. D., Secretary.

OAKLAND COUNTY

A meeting of the Oakland County Medical Society was held at the Pontiac Board of Commerce, 6:30 p. m. Feb. 10, 1927. Twenty-four members were present, and two visitors.

Reading of the minutes of the previous meeting was followed by reading of papers of letters by the secretary. Motion was made by Dr. Ferguson, supported by Dr. Naefie that the Legislative committee act promptly in the matter of the bill before the State Legislature to abolish the proposed Tuberculosis Sanitarium at Ann Arbor.

Dr. C. H. Benning introduced Dr. R. L. Kahn, State Immunologist. Dr. Kahn gave a most interesting talk on the Kahn Precipitation Test and the Diagnosis of Syphilis." No discussion of any moment followed Dr. Kahn's talk, but many questions were asked showing that his talk met with a great deal of interest. The meeting adjourned.

The next meeting of the Oakland County Medical Society will be March 11, 1927 at which time we will have a paper on Gynecological Problems, by Dr. George Kamperman of Detroit.

Frederick A. Baker, Secretary.

EATON COUNTY

The Eaton County Medical Society held its regular monthly meeting on the evening of Thursday, Feb. 24 at the Harriet Chapman Hospital, Eaton Rapids, Mich.

Eleven of our members were present. The meeting was opened by the president, Dr. Sackett. The letter regarding a new Tubercular Sanitarium in Ann Arbor from the State Secretary

was read. Discussion was free and about evenly divided for and against. As a result the letter was tabled and no action taken, because of a division of sentiment. As there was no further business we proceeded to the program of the evening.

Dr. Sleight of Battle Creek addressed the Society on Glaucoma, Iritis, and Conjunctivitis. His talk was very practical and with the free discussion that followed, very beneficial to all present.

Dr. Harry Knapp of Battle Creek then addressed us on "Common Orthopedic Problems in Common Practice." This talk was thoroughly enjoyed by all.

Following these talks a light lunch was served and the meeting adjourned.

H. J. Prall, Secretary.

BAY COUNTY

Monday evening, Feb. 28, the society was addressed by Dr. Jackson, President of the State Medical Society. He took as his subject "The Diagnosis of Gall Bladder Disease." The talk, which was illustrated, was very interesting and elicited free discussion.

April 27, Wednesday evening, the Tri-City (Saginaw, Flint, Bay City) Medical meeting will be held at Bay City. A banquet will be held at the Wenonah hotel at 7 o'clock, after which the members will adjourn to the Washington theater, one-half block distant, to hear Dr. Chevalier Jackson of Philadelphia on the subject of "Bronchoscopic and Esophagoscopic Cases of General Medical and Surgical Interest." The address will be accompanied by lantern slides and moving pictures.

Monday evening, Feb. 14, the society was addressed by Mr. Otto Louis on the subject of "A Modern Drug Store."

Mr. Louis is in the drug business and is past president of the Bay City Chamber of Commerce.

Wednesday, May 11, the society will provide the program for the Alpena society at Alpena. The September meeting will be provided by the Alpena members at Bay City.

ALPENA COUNTY

The Alpena County Medical Society met at the new Alpena hotel at 6:30 o'clock for dinner, after which the regular monthly meeting was called to order by the President, Dr. F. J. O'Donnell.

Papers were read by Dr. Leo F. Secrist on "The Treatment of Ante-partum Haemorrhage" and by Dr. Earnest L. Foley on "Serum Treatment of Scarlet Fever." Both papers proved very interesting and were freely discussed by all members present.

The Secretary was instructed to write Dr. Guy L. Kiefer inviting him to come to Alpena and deliver a public address on matters appertaining to Public Health. A reply has been received from Dr. Kiefer accepting this invitation for the latter part of April or early in May, at which time our County Society expects to put on a rousing Community Public Health meeting with our State Commissioner of Health as the principal speaker.

We have arranged for a reciprocal program

with the Bay County Medical Society for the coming year. They are to give us a program and be our guests, at Greenbush Inn on May 11 and our Society is to give them a return program early in September, at Bay City. We are endeavoring to arrange at least two more reciprocal programs with other county societies but as yet these have not been definitely consummated.

W. B. Newton, Secretary.

IONIA-MONTCALM COUNTY

The March meeting was held at Ionia Thursday evening, March 10th.

Thirty members and guests partook of the dinner, which was served at the Reed Inn.

Dr. Guy L. Keifer, Commissioner State Health Department, gave a talk on "Co-operation Between Physicians and the State Health Department." He explained how the State Health Department is endeavoring to help and work in co-operation with physicians in the work of diagnosing, preventing and curing contagious diseases.

Dr. C. C. Young, Director of Laboratories, gave an instructive talk on the amount of laboratory work done by the Health Department, but confined most of his remarks to the development of the successful preventive and curative treatment of scarlet fever. The State Health Department has been conservative in regard to using or advertising this curative treatment but believe now that it is so thoroughly proven that this offers us the best remedy which we have at our command to combat scarlet fever. Both talks were greatly appreciated and freely discussed.

Applications for membership of Dr. F. A. Hargrave, Dr. W. H. Wilkinson, Dr. John W. Foan, Dr. J. A. P. Duncan and Dr. H. L. Innis were read and all were elected to membership.

It was moved, supported and carried that our Secretary be instructed to write to our state representative and senator that our County Medical Society has gone on record as favoring the erection of a new tuberculosis sanatorium at Ann Arbor.

H. M. Maynard, Secretary.

KALAMAZOO COUNTY

The last regular dinner meeting was held in the academy rooms on Tuesday the 15th. The dining room was again filled and our only hope is that it will continue to be so at every meeting of the year.

A very interesting and concise dinner talk was given by Dr. Nancy Scott of Western State Normal as abstracted elsewhere in the bulletin.

The regular meeting was then called to order by the president, Dr. Bartholomew.

Report of committees:

Dr. Shillito reported that he, with Doctors Thompson and Jackson, attended a meeting of the physicians in Lansing relative to the building of the new tuberculosis hospital. They were of the unanimous opinion that the bill to build this hospital should be passed and not repealed. Dr. Jackson pointed out that in favor of the original proposition to build the hospital at Ann Arbor was the need of more beds for tuberculous patients, the presence in the university hospital of the different specialties, the patients could be used for instruction, and it would give an opportunity

for research work that is not done a Howell, Mich. It was suggested that sentiment in favor of the original bill be aroused in Allegan and Van Buren counties.

The application for active membership in the society of Dr. James H. Swan of Marcellus was read.

The president mentioned the need of available men to send out when requests were made to talk on medical subjects before parent teacher associations and so forth. Dr. Boys believed this was a good job for the secretary, to recruit these men when necessary. The regular secretary was not present to defend himself.

A letter addressed to Dr. Jackson from the Calhoun county medical society was read, inviting our members to two meetings to be held in Battle Creek. The first was a dinner meeting at the sanitarium on March 8, in honor of Elliot P. Joslin who would talk on diabetes. The second meeting will be held April 5 at the Kellogg Corn Flakes company, 7:30 Eastern time. Dr. F. H. Albee will talk at this meeting.

KENT COUNTY

The Kent County Medical Society has met twice in both January and February.

The first meeting in January was addressed by C. C. Young, Director of the Laboratories of the State Board of Health, regarding the use of scarlet fever toxin and antitoxin. This meeting was also attended by Dr. Guy L. Kiefer, the newly appointed State Commissioner of Health, who talked a few minutes concerning his experience with scarlet fever immunology, which has been extensive, and also concerning the relations which he thought ought to exist between the State Department of Health and the practicing profession.

The second meeting in January was held at Blodgett Memorial Hospital and case reports were given by members of the staff of that hospital.

The first meeting in February was addressed by Dr. Frankwood E. Williams, Director of the National Committee for Mental Hygiene who spoke upon the subject "The Mental Health Aspects of General Medicine." Dr. Williams particularly emphasized the mental hygiene of childhood. Among the discussants of this address were Dr. William Morter, assistant superintendent of the Kalamazoo State Hospital, and Dr. Robert Haskell, Medical Director of the Wayne County Training School.

The second meeting in February was given at Butterworth Hospital and consisted of case reports of brain injuries and the amidoxyl treatment of arthritis.

The programs of two of the meetings have been filled by local members of the society. These meetings we find are particularly interesting and furnish material and time for a free discussion which is of practical value.

The Kent County Medical Society has undertaken several public health education projects.

A program is being arranged for Cancer Week, under the auspices of this society and in conjunction with the Michigan State Medical Society. Also lectures are to be given by the members of the society in the various high schools upon subjects of historical interest in medicine. As-

sistance is rendered in this work by the Extension Department of the University of Michigan.

In addition a program of health lectures is being formulated in conjunction with the industrial managers of various businesses in Grand Rapids, whereby such health lectures shall be given to the employees of these firms. These business men believe that outside of other considerations of education that education in the care of the health will be of direct economic benefit to them in the saving of days which employees are absent from work on account of illness and accidents. Posters, circulars, pamphlets to accompany these lectures are to be obtained from the American Medical Association.

The society has received eight new members since Jan. 1, 1927, either by transfer from another society or as new applicants.

H. T. Clay, Secretary.

JACKSON COUNTY

February meeting of the Jackson County Medical Society was held at Mercy Hospital, Jackson, February 22, 1927; Dr. C. S. Clark presiding.

Dr. Guy L. Kiefer, State Commissioner of Health, addressed the Society on "The relation of the Physician to the Department of Health." He stressed the necessity of complete co-operation in contagious and infectious disease; the value of diphtheria toxin-antitoxin and the scarlet fever immunization by the three dose toxin method; the value of the school inspection program to the physician, especially the O. R. & L. men and the pediatrician.

The society voted to purchase a stereopticon lantern and a committee was appointed to secure it.

* * *

March meeting of the Jackson County Society held at the Tip Toe Inn, Jackson, Mich., March 15, 1927.

Following a T-bone steak supper, Dr. Clark called the meeting to order and announced his committees for 1927.

The newly organized collection department of the society was discussed and the manager lauded for his prompt and efficient work on accounts already turned in.

Dr. E. C. Taylor of Jackson gave a very interesting talk on "Medicinal Value of Certain Citrus Fruits." He cited cases which had been under his observation and outlined treatment using the citrus fruits.

* * *

The Jackson County Medical Society have organized an "Emergency Relief Unit for Disaster" in co-operation with Richard F. Smith Post No. 29, American Legion, Jackson, Mich. Twenty members of the society are ex-service men.

The paper organization is as follows:

Dr. R. M. Cooley, Commanding Officer.

Dr. D. B. Marsh, Adjutant.

Dr. M. J. McLaughlin, Dr. H. H. Hurley, Triage officers.

Four surgical teams.

One medical team.

One O. R. & L. team.

Major A. M. Anderson, Q. M. C. Ses., Supply Officer.

Major P. L. Taylor, Inf. Res., Guard Officer.

Each hospital has agreed to furnish emergency surgical and medical supplies according to a prescribed list prepared and in their office, also to furnish available and necessary nurses.

The Consumers Power Company have assured us of their complete co-operation and willingness to furnish trucks and men.

The American Legion post members will act as guards and the guard officer and adjutant are special deputy sheriffs with authority to prevent spectators, etc., from interfering with necessary relief work.

Five motor ambulances are available for evacuation of injured to hospitals outside of the affected area.

D. Burr Marsh, Secretary.

LENAWEE COUNTY

The February meeting was held at the City Hall, Adrian, Thursday evening the 24th. There were 21 members present including four new members as follows: Dr. C. S. Lane, Hudson; Dr. F. J. McCue, Hudson; Dr. A. H. Veezey, Hudson, and Dr. J. W. Barnes, Hudson.

The meeting was called to order by President Hammel.

The minutes of the last meeting were read and approved.

The report of the Legislative committee was carried over to the March meeting.

A motion was made by Dr. F. A. Howland that the Legislative committee file a protest with Senator Norman Horton and Representative John Rorick that the Lenawee County Medical Society is opposed to the repeal of Act No. 357 of 1925 relative to the building of a Tuberculosis Sanitarium at Ann Arbor. Seconded and carried.

Dr. F. E. Andrews moved that the Secretary notify Senator Horton and Representative Rorick instead of the Legislative committee. Carried.

Motion by Dr. E. T. Worden that the Lenawee County Medical Society go on record as being opposed to so-called organized Free Clinics in the county with the exception of Clinics conducted for the benefit of indigent people. Carried.

Dr. C. H. Heffron suggested that the County Society conduct a series of Free Clinics in various parts of the county for the benefit of the needy poor.

It was decided to make this a subject for discussion at the next meeting.

It was announced by the Secretary that the meeting for March would be held in Hudson at the residence of Dr. F. J. McCue. The speaker will be Dr. Esli T. Worden of Adrian who will speak on "Diseases of the Ear, Nose and Throat."

It was announced by the Secretary that the April meeting will be a joint meeting with the Lenawee Bar Association and that Dr. Frank B. Tibbals of Detroit will be the speaker.

The scientific program consisted of a paper by Dr. F. A. Howland of Adrian. His subject was "Some Common Diseases and Injuries of the Eye, and Their Treatment." The paper was instructive and well given, and gave evidence of a great deal of preparation by the author.

The paper was discussed by Dr. S. J. Rubley of Britton and Dr. E. T. Worden of Adrian.

Dr. A. W. Chase of Adrian explained a method

for locating foreign bodies in the eye by means of the X-Ray.

Adjournment.

R. G. B. Marsh, M. D., Secretary.

On Thursday evening, March 3, 1927, 30 physicians of Lenawee County gathered in the parlor of the Blissfield Tavern to do honor to one of the oldest practicing physicians of the county, Dr. R. M. Eccles.

One of the doctors acted as a "patient" and was reposing on a couch in the darkened room, when Dr. Eccles was brought in by Dr. Lamley who had asked him to come to the hotel for consultation. When Dr. Eccles asked to have the lights turned on in order that he might examine the patient, he found himself confronted by the largest gathering of Lenawee County physicians ever seen in one group.

It was a complete surprise to the doctor, he having had not the slightest rumor of what was being planned.

An excellent chicken dinner was served in the dining room of the Tavern and numerous impromptu speeches were made.

Dr. R. M. Eccles was born in Ontario, Canada on March 3, 1858, and received his medical education at the medical school of the University of Toronto. He came to Blissfield, Mich., in 1879 and has practiced there ever since. He is regarded as one of the best liked men in the county not only by his fellow workers but by the public as well.

SAINT CLAIR COUNTY

Regular meeting of Saint Clair County Medical Society, held at Hotel Harrington, Port Huron, Mich., Feb. 17, 1927. Supper was served at 6:30 p. m. This was followed by a short social hour. Business session started at 8 p. m. Minutes of meeting of Feb. 3, 1927, read and approved. The President reported illness of Dr. C. B. Stockwell, an honorary member of our society. Dr. J. H. Burley addressed a letter to the society thanking us for the kind attention of his fellow members during his illness and for the potted plant sent him. A letter was read to the society from the Free Clinic Association. This was referred to a standing committee on clinics. Several suggestions were made to the Health Officer, Dr. Gertrude O'Sullivan, by members of the society relative to closing of the Health Office during the noon hour and also the closing of same from noon Saturday until the following Monday morning. An inquiry was made regarding the use of the City Health Office Nurse attending non-contagious cases. Dr. O'Sullivan stated that this nurse was employed on a part time basis, that is, worked only during the forenoon and that the hours were too short to allow care of the contagious cases. The following members were present as Dr. Albert French, Coroner of Wayne County, began his paper: Doctors Ryerson, Ard, Smith, Waters, Heavenrich, Wight, Kesi, Howard Brush, O'Sullivan, Callery, Wellman, LaRue and Grice. Miss Marie Fouchard, Superintendent of Port Huron Emergency Hospital was present as a guest.

Dr. French addressed the society upon, "Sudden Death from Natural Causes." The subject was covered in a very acceptable manner and was enjoyed by the members present. Dr. French promised a revised typewritten copy to the Secre-

tary for submission to the State Society but has, so far, failed to keep his promise. The paper was discussed by Doctors Callery, Waters, Ryerson, O'Sullivan, Howard Brush and Heavenrich. Dr. Ryerson expressed the thanks of the society to the speaker for his splendid paper. Dr. Heavenrich made the suggestion that attendance at our meetings was not as good as it might be and that efforts be made to increase it. It was decided to divide the city into two parts and have a member assigned each week to call all members up on the telephone and remind them of the meeting. Meeting adjourned at 9:10 p. m.

Regular meeting of Saint Clair County Medical Society, held at Hotel Harrington, Port Huron, Mich., March 3, 1927. Supper was served at 6:30 p. m. followed by a short social hour. Business meeting called to order by President Ryerson at 8:15 p. m. Members present, Doctors Bowden, Wheeler, Ryerson, Heavenrich, Callery, Clancy, Patterson, MacKenzie, Bovee, Treadgold, Ard, Vroman, Smith, Attridge, Wellman, Norris, Waters, Thomas, Grice and Windham. Visitors: Doctors Penberthy, Manwaring, Sykes, Meredith and Gaddis.

Dr. G. C. Penberthy of Detroit read a most interesting paper on "Fractures" and supplemented his talk by a series of lantern slides showing apparatus and methods of treatment of the various types of fracture. There was a brief discussion following Dr. Penberthy's paper before his departure to board a conveyance leaving for Detroit. The President thanked the speaker for his interesting paper.

Dr. J. G. R. Manwaring of Flint spoke upon the subject, "Chemical and Physical Characteristics of Healing and Infection of Wounds." This was a most interesting and profitable paper. It is regretted that the Secretary could not have recorded this talk in shorthand. If it is not out of place or improper it is suggested the Secretary-Editor obtain a copy of this paper from Dr. Manwaring for re-print in the Journal. This paper was discussed by Doctors Clancy, Heavenrich, Sykes and Ryerson, Dr. Manwaring closing in the usual manner. A rising vote of thanks was extended the speaker by the society. The meeting adjourned at 10:35 p. m.

George M. Kesl, Secretary-Treasurer.

COUNTY SECRETARIES ANNUAL CONFERENCE

Hayes Hotel, Jackson, April 27, 1927

In compliance with our policy, the 1927 Annual Conference of all of our County Secretaries will be held in the Hayes Hotel, Jackson, on April 27th.

The meeting is called for 11:00 a. m. and will continue through to 4:30 p. m. with a luncheon at noon. Jackson is on fast time.

A detailed program will be mailed to all Secretaries on about April 10th. Presidents of County Societies are urged to attend. The Councilors will also be present.

Please reserve this date—we need your co-operation to cause this conference to record the greatest degree of good.

ROSTRA OF MEMBERS

As indicated in the minutes of the Executive Committee a rostra of all members in good standing will be printed and supplied to each member for his reception room table. The rostra will be compiled from our records as of May 1st. County Secretaries are requested to call this to the attention of their members. Only those whose 1927 dues are paid, will be so listed in the rostra. Please urge payment and thus obviate omission of names.

BOOK REVIEWS AND MISCELLANY

Offering Suggestions and Recommendations

MODERN PRACTICE OF PEDIATRICS—William Palmer Lucas, M. D., LL. D., Professor of Pediatrics, University of California Medical School; Physician in Chief, Children's Department, University of California Hospital; Consulting Physician, Baby Hospital, Oakland, California; Visiting Physician, San Francisco Hospital for Children; Visiting Physician, San Francisco Hospital. Price \$8.50. The Macmillan Company, New York, publishers,

This work has for its incentive the desire on the part of the author to emphasize the relationship between the study of the diseases of childhood and the positive aspects of health. In covering what the author terms the "orthodox" field of pediatrics, there is evident throughout a strong insistence upon preventive medicine. "I have tried to show," says Dr. Lucas in the preface "how the most technical, the most intricate problems of the research laboratory—how the most complicated aspects of clinical pediatrics—are related in their contribution and significance to the prevention of diseases."

PHYSICIANS OF THE MAYO CLINIC AND MAYO FOUNDATION—A series of 635 biographical sketches with 611 portraits and including complete and accurate data concerning the professional life of each physician prior to January, 1926. Octavo volume of 578 pages. Cloth, \$7.50. W. B. Saunders Company, Philadelphia and London.

Received.

HEALTH SUPERVISION AND MEDICAL INSPECTION OF SCHOOLS—Thomas D. Wood, M. D., College Physician, Adviser in Health Education, and Professor of Physical Education, Teachers College, Columbia University, and Hugh G. Rowell, M. D., Physician to the Horace Mann Schools, Lecturer and Assistant Physician, Teachers College, Columbia University. Octavo of 637 pages, with 243 illustrations. Cloth, \$7.50 net. W. B. Saunders Company, Philadelphia and London.

Received.

A TEXTBOOK OF CLINICAL NEUROLOGY—Israel S. Wechsler, M. D., Assistant Professor of Clinical Neurology, Columbia University, New York; Attending Neurologist, The Montefiore Hospital, New York. Octavo volume of 725 pages with 127 illustrations. Cloth, \$7.00. W. B. Saunders Company, Philadelphia and London.

An excellent text and digest.

CANCER OF THE RECTUM, ANUS AND COLON

I have been requested to write an editorial on the above subject with the hope of stimulating interest and activity in cancer week. In no sense do I propose to exhaust the subject nor the reader, as the following few lines will disclose.

Cancer of the rectum, anus and colon is a condition which develops insidiously, and with few exceptions ultimately results in death. There is no cure other than early surgery—very early. Early cancer presents no symptoms as a general rule, and most often patients arrive with the complaint of bleeding, pain variously manifested, diarrhoea, including a discharge from the bowel of pus, often obstruction which has been interpreted as constipation. May we therefore suggest that possibly the earliest common symptom should arouse the interest of the medical men is in sustained change in bowel action. Bleeding as a rule is a late symptom of cancer, and the condition from which it results is usually beyond help other than by such palliative means as is afforded by a colostomy, and the various means of local treatment. We are well aware that there are occasional and remarkable cures resulting from the various types of treatment; however, they are the exceptions, and not the rule. Out of approximately 2,500 tabulated cases we may cite that the first symptoms complained of in 622 was blood in the stools; pain in 324; diarrhoea 300; constipation 298; loss of weight 243; tenesmus 239; pain in abdomen 169; pain in back 113, with the remainder complaining of various symptoms which we will not tabulate.

We will not go into the differential diagnosis, other than to stress the importance of determining definitely in all suspicious cases that the pathology is not a malignancy. We will mention that any tumor or obstruction in the rectum and anus is suspicious of cancer, and under no circumstances should be treated at all, other than radically, until the determination is made definitely. It is common experience for an advanced cancer case to be referred to the specialist that has been treated by some careless, and I believe we are justified in saying, incompetent medical man for "piles or intestinal indigestion." Any pathology that can be felt by digital examination should be carefully investigated, and malignancy excluded. I may say that no physical examination is complete without at least a digital examination of the anus and rectum. Any medical man who considers himself competent and thorough should follow a digital examination with a proctoscopic examination, and in the presence of symptoms a sigmoidoscopic examination. When it is considered that approximately 1 in 4 cancers located in the gastro-intestinal tract are found in the rectum, the importance of the above suggestions can be readily appreciated. Again, I would mention that bleeding from cancer is a late symptom, as is loss of weight. There is no cancer age, since it is not unusual to find cancer of the rectum with patients in their early twenties. Cancer spreads by contiguity, by the lymphatics, and through the blood stream. Contiguous spread occasionally involves the prostate in men, though great resistance is offered by the aponeurosis.

Briefly, symptoms of cancer in the pelvic colon may be divided into two classes: premonitory first, and second those in which the tumor is manifested and cachexia has appeared. In the first mentioned stage there may be pain accompanying gastric and intestinal disorders; this may be localized or assume the form of colic, although pain is the more constant. It is not necessarily continuous. The pain may be referred to the lumbar region or the umbilicus, and quite commonly to the caecum and radiation along the cord to the left testis may be experienced. With the arrival of the second class, where the tumor is discovered, we have an advanced condition, though in this location, as opposed to the rectum, the prognosis is by no means so bad. A barium enema with X-ray observation should supplement any complete proctologic examination, especially where symptoms point to the colon. Nodules in the liver which are commonly present in advanced carcinoma of the rectum are usually not demonstrated other than by abdominal section.

Conclusion. Examine your cases digitally always, if you will, but without exception where there are symptoms. Examine them intelligently and carefully. Ordinary internal hemorrhoids cannot be felt digitally, therefore do not diagnose anything within the anus and rectum that you can feel as "piles." Polyps are potentially malignant. Stricture is often diagnosed as cancer, while unfortunately the fatal error is often made of diagnosing cancer as stricture. Do your part, especially during "Cancer Week," but in any event examine your cases and know what you are dealing with—do not guess. Guessing is often fatal to your patient, as well as to your reputation.—H. J. Hirschman.

SILVER COMPOUNDS

Silver nitrate first demonstrated the bactericidal property of silver. This was, obviously, an invitation to the chemist to devise a silver compound that could be used freely in solution, as silver nitrate could not. Especially desired was a silver salt that would kill the gonococcus without irritating the urethra, for it was soon learned that silver was especially efficacious as a gonococcide. To the majority of silver compounds offered from time to time one of two objections is made by the patient: first, they hurt; second, they leave dark stains on the linen.

Now comes a comparatively new silver iodide preparation—one that actually protects the silver and the iodine from the action of light, and yet leaves its activity as a germicide apparently unimpaired. Neo-Silvol, as this product is called, is said to be 20 times as active as pure carbolic acid (in other words, to have a phenol coefficient of 20) in contact with the gonococcus, and at the same time to be notably bland in its effect upon the inflamed tissues and free from the dark-staining tendency that characterizes other silver preparations.

Further particulars are offered to the readers of the advertisement on Neo-Silvol which appears on another page of this issue.